

850007

V3429

TYPE IMPACT:

- REAR MOVING BARRIER
- LEFT SIDE MOVING BARRIER
- RIGHT SIDE MOVING BARRIER
- OTHER

BARRIER TYPE:

- FLAT FACE
- CONTOURED
- OTHER

OTHER:

- MDB TO PARKED VEH-70% L REAR IMPACT

TEST REPORT

REPORT NO. PG _____
 SRDL TEST NO. C11818
 TEST DATE DEC 18, 1997

Enclosure 4
 54 pages

VEHICLE DESCRIPTION

MAKE	YEAR	BODY TYPE	BODY STYLE	DIVISION CAR NO.	BUILD STATUS	
FORD	98	SEDAN	4-DOOR	8W9182D	PRODUCTION	
ENGINE	CONFIGURATION	L4	DISPLACEMENT	2.0 L	PREVIOUS IMPACTS	NONE
	FUEL	GASOLINE	TRAILER HITCH	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	TYPE	
	FUEL INDUCTION	N/D	SPARE TIRE TYPE	COMPACT		
FUEL TANK	USABLE CAPACITY	48.1 L	UNUSABLE CAPACITY	N/D L	AC	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
SPECIAL FEATURES:						

TEST CONDITIONS

MOVING BARRIER			
VELOCITY AT IMPACT	80.9 km/h	LOCATION	VEHICLE <input type="checkbox"/> DRIVER SRP <input type="checkbox"/> OTHER <input checked="" type="checkbox"/>
TEST MASS	1371 kg	AT IMPACT	

VEHICLE			
TEST MASS	LESS DUMMIES <input type="checkbox"/>	FRONT	882 kg
	INCLUDING DUMMIES <input checked="" type="checkbox"/>	REAR	503 kg
		TOTAL	1385 kg
FUEL TANK	TEST VOLUME: CONTENTS	STODDARD SOLVENT	
	93 % OF USABLE CAPACITY=	44.7 L	
FUEL LINES AND SYSTEM FILLED		YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/>
VEHICLE SERVICE BRAKES ON @ IMPACT		YES	<input type="checkbox"/> NO <input checked="" type="checkbox"/>
SEAT POSITION	MID		
VEHICLE ATTITUDE			
J= DRIVER SIDE	200 mm	PASSENGER SIDE	200 mm
K= DRIVER SIDE	210 mm	PASSENGER SIDE	210 mm
COMMENTS:			

DUMMIES			
LEFT FRONT	MAKE	GM50H	NO. 31
	TYPE	50TH %ILE MALE	MASS 90.0 kg
	RESTRAINT	L/S & SIR	
RIGHT FRONT	MAKE	GM50H	NO. 26
	TYPE	50TH %ILE MALE	MASS 90.0 kg
	RESTRAINT	L/S & SIR	

TEST CONFIGURATION:

PHOTOGRAPHIC COVERAGE

OFFBOARD	OVER ALL	<input checked="" type="checkbox"/>	FUEL TANK	<input checked="" type="checkbox"/>
	REAR HALF	<input checked="" type="checkbox"/>	OVERHEAD	<input checked="" type="checkbox"/>
	PIT	<input checked="" type="checkbox"/>		
OTHER	ONBOARD-LF ATD	<input checked="" type="checkbox"/>		
	ONBOARD-RF ATD	<input checked="" type="checkbox"/>		

RECORDED DATA

FLOOR PAN ACCEL.	LONG <input type="checkbox"/>	LAT <input type="checkbox"/>	TRIAX <input type="checkbox"/>
FRAME ACCEL	LONG <input type="checkbox"/>	LAT <input type="checkbox"/>	TRIAX <input type="checkbox"/>
ROCKER PANEL ACCEL.	LONG <input type="checkbox"/>	LAT <input type="checkbox"/>	TRIAX <input checked="" type="checkbox"/>
UPPER ENGINE ACCEL	<input checked="" type="checkbox"/>	REAR FRAME RAIL ACC	<input checked="" type="checkbox"/>
SEAT O/B RAIL ACCEL	<input checked="" type="checkbox"/>	SEATBACK CLOSEOUT	<input checked="" type="checkbox"/>
SEAT BACK ACCEL	<input checked="" type="checkbox"/>		

N/A NOT APPLICABLE N/D NOT DETERMINED

POST-TEST OBSERVATIONS

					YES	NO	N/A	N/D	NOTE	
D O O R S	ALL EXTERIOR DOORS REMAINED CLOSED				X					
	ALL EXTERIOR DOORS REMAINED LATCHED				X					
	ALL EXTERIOR DOOR HINGES REMAINED INTACT				X					
			LATCH OPERABLE		DISTANCE DOOR MAY BE OPENED (1)		(1) DISTANCE MEASURED BETWEEN DOOR OUTER SURFACE AND ADJACENT BODY OUTER SURFACE WHEN 450 N PULL IS APPLIED TO HANDLE.			
			YES	NO OTHER						
	LEFT FRONT		X		0	mm				
	RIGHT FRONT	X			FULL	mm				
LEFT REAR		X		0	mm					
RIGHT REAR		X		0	mm					
B O D Y	BODY TO-FRAME OR CRADLE MOUNTS REMAINED ATTACHED				X					
	SPARE TIRE REMAINED IN PLACE				X					
	TRUNK LID OR REAR HATCH REMAINED INTACT				X					
	TRUNK LID OR REAR HATCH REMAINED CLOSED				X					
D R I V E	REAR AXLE INTACT						X		1	
	REAR AXLE DEFORMED						X		1	
	DRIVESHAFT INTACT						X		1	
	DRIVESHAFT DEFORMED						X		1	
F U E L	FUEL TANK RETAINED				X					
	FILLER TUBE INTACT				X					
NOTE:										
1. VEHICLE WAS FRONT WHEEL DRIVEN.										
INTENDED OVERLAP=1169 MM; ACTUAL										
OVERLAP=1149 MM.										

VEHICLE DATA

REAR IMPACT					
VEHICLE RESIDUAL CRUSH	DRIVER SIDE	1030	mm	FUEL TANK RESIDUAL CRUSH	DRIVER SIDE 3 mm
	PASSENGER SIDE	495	mm		PASSENGER SIDE 0 mm
VEHICLE DYNAMIC CRUSH	DRIVER SIDE	N/D	mm	FUEL TANK RESIDUAL DISP	DRIVER SIDE 31 mm
	PASSENGER SIDE	N/D	mm		PASSENGER SIDE 24 mm
SIDE IMPACT					
VEHICLE RESIDUAL CRUSH			FUEL TANK LATERAL RESIDUAL CRUSH		
FRONT	mm		FRONT	mm	REAR mm
MID	mm		FUEL TANK LATERAL RESIDUAL DISPLACEMENT		
REAR	mm		FRONT	mm	REAR mm

NOTE: (A) RESIDUAL CRUSH MEASUREMENTS +OR- 25mm, OTHER RESIDUAL MEASUREMENTS +OR- 5mm
(B) GENERALIZED TOLERANCE CANNOT BE SPECIFIED FOR DYNAMIC MEASUREMENTS BECAUSE OF ACCURACY VARIATIONS DUE TO DIFFERENCES IN ANALYSIS TECHNIQUES.

A TOLERANCE FOR SPECIFIC TEST DATA CAN BE FURNISHED ON REQUEST.
N/A NOT APPLICABLE N/D NOT DETERMINED

STRIKING VEHICLE
 STRUCK VEHICLE

REPORT NO. PG
 SRDL TEST NO. C11818

PAGE NO. 3

FUEL SYSTEM INTEGRITY

FUEL SPILLAGE (MASS) AT BARRIER IMPACT SITE

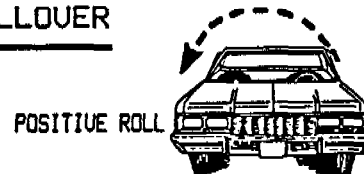
DURING IMPACT TRACE gm DURING FIRST FIVE MINUTES AFTER IMPACT .3 gm

AFTER FIRST FIVE MINUTES: 0 gm

COMMENTS: _____

FUEL SPILLAGE DURING STATIC ROLLOVER

ROLL DIRECTION: POSITIVE NEGATIVE
 ROLL RATE-APPROXIMATELY 2 MINUTES PER 90 DEGREE INCREMENT
 ROLL DATE DEC 19, 1997



ROLL INCREMENTS	FUEL SPILLAGE BY MASS					
	FIRST 5 MINUTES OF ROLL INCREMENT		FOR NEXT MINUTE		FOR NEXT MINUTE	
0-90	****	gm	N/A	gm	N/A	gm
90-180	N/A	gm	N/A	gm	N/A	gm
180-270	N/A	gm	N/A	gm	N/A	gm

COMMENTS: ****
FIRST 0-90 DEG ROLL INCREMENT STODDARD SOLVENT LEAKING FROM FILLER CAP
EXCEEDED 142+ GRAMS. ROLL WAS TERMINATED.

ROLL DIRECTION: POSITIVE NEGATIVE
 ROLL RATE-APPROXIMATELY 2 MINUTES PER 90 DEGREE INCREMENT
 ROLL DATE _____



ROLL INCREMENTS	FUEL SPILLAGE BY MASS					
	FIRST 5 MINUTES OF ROLL INCREMENT		FOR NEXT MINUTE		FOR NEXT MINUTE	
0-90	N/A	gm	N/A	gm	N/A	gm
90-180	N/A	gm	N/A	gm	N/A	gm
180-270	N/A	gm	N/A	gm	N/A	gm

COMMENTS: _____

N/A NOT APPLICABLE

DUMMY LOCATION IN VEHICLE

The following values reflect the dummy location in the test vehicle in corporate body coordinates. The location is determined relative to the specific vehicle platform front fiducial mark.

BODY COORDINATES (mm)

	LONGITUDINAL	VERTICAL
<u>LEFT FRONT PASSENGER</u>		
HEAD	<u>386</u>	<u>872</u>
HIP	<u>272</u>	<u>208</u>
KNEE	<u>117</u>	<u>322</u>
PELVIC ANGLE	<u>22.9</u>	SEAT BACK ANGLE <u>19</u>
<u>RIGHT FRONT PASSENGER</u>		
HEAD	<u>379</u>	<u>846</u>
HIP	<u>258</u>	<u>206</u>
KNEE	<u>123</u>	<u>319</u>
PELVIC ANGLE	<u>21.7</u>	SEAT BACK ANGLE <u>19</u>

Dummy lateral location: 0 mm relative to SEAT C/L

Comments: REFERENCE VALUES TAKEN FROM FRONT OUTBOARD SEAT

BOLT, SEAT BOLT REF. SET AT: X=0, Y=0, Z=0.

TEST DATA PROBLEM SUMMARY

C11818 8W9182D SC 80.9 KM/H
LTV MDB TO STATIONARY VEHICLE - L. REAR IMPACT 70 % OVERLAP
Test Engineer: T.J.Sienkiewicz Test Date: 12/18/97

See last page of report for statistics.

R. FRT SEAT O/B MOUNTING RAIL
LATERAL ACCELERATION

CHANNEL 61 Error Code 14
PLOT NUMBER 49 LOST? no

Remarks: TRANSDUCER WIRES WERE DAMAGED/CUT
 TRANSDUCER WAS DAMAGED

L. FRT SEAT BACK
LONGITUDINAL ACCELERATION

CHANNEL 63 Error Code 11
PLOT NUMBER 51 LOST? no

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

L. FRT SEAT BACK
LATERAL ACCELERATION

CHANNEL 64 Error Code 11
PLOT NUMBER 52 LOST? no

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

L. FRT SEAT BACK
VERTICAL ACCELERATION

CHANNEL 65 Error Code 11
PLOT NUMBER 53 LOST? no

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

R. FRT SEAT BACK
LONGITUDINAL ACCELERATION

CHANNEL 66 Error Code 11
PLOT NUMBER 54 LOST? no

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

R. FRT SEAT BACK
LATERAL ACCELERATION

CHANNEL 67 Error Code 11
PLOT NUMBER 55 LOST? no

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

R. FRT SEAT BACK
VERTICAL ACCELERATION

CHANNEL 68 Error Code 11
PLOT NUMBER 56 LOST? no

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

L. REAR ROCKER
LONGITUDINAL ACCELERATION

CHANNEL PLOT NUMBER	75 63	Error Code LOST?	11 no
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Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

L. REAR ROCKER
LATERAL ACCELERATION

CHANNEL PLOT NUMBER	76 64	Error Code LOST?	11 no
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Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

L. REAR ROCKER
VERTICAL ACCELERATION

CHANNEL PLOT NUMBER	77 65	Error Code LOST?	11 no
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Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

L. REAR FRAME RAIL
LONGITUDINAL ACCELERATION

CHANNEL PLOT NUMBER	84 72	Error Code LOST?	11 no
------------------------	----------	---------------------	----------

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

L. REAR FRAME RAIL LATERAL ACCELERATION	CHANNEL PLOT NUMBER	85 73	Error Code LOST?	11 no
Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION TRANSDUCER WAS DAMAGED				

L. REAR FRAME RAIL VERTICAL ACCELERATION	CHANNEL PLOT NUMBER	86 74	Error Code LOST?	11 no
Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION				

R. REAR FRAME RAIL LONGITUDINAL ACCELERATION	CHANNEL PLOT NUMBER	87 75	Error Code LOST?	11 no
Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION				

R. REAR FRAME RAIL LATERAL ACCELERATION	CHANNEL PLOT NUMBER	88 76	Error Code LOST?	11 no
Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION				

R. REAR FRAME RAIL
VERTICAL ACCELERATION

CHANNEL	89	Error Code	11
PLOT NUMBER	77	LOST?	no

Remarks: DATA AFFECTED BY ACCELEROMETER ROTATION

The total number of channels recorded for this test: 95 Total lost channels: 0

LEFT FRONT
 ANTHROPOMORPHIC TEST DEVICE SUMMARY DATA
 LTV MDB TO STATIONARY VEHICLE 80.9KM/H

C11818 L.REAR IMP 70% OVERLAP
 SC 8W9182D 4-DOOR

ATD TYPE: GM50H
 TEST DATE: 12/18/1997

MEASURED QUANTITY	100% OF IARV	150% OF IARV	IARV VALUE	IARV
HIC, LIMITED TO 15 MS			220	1000
HIC, LIMITED TO 36 MS			250	1000
NECK FLEXION			59NM	190NM
NECK EXTENSION			23NM	57NM
NECK TENSION			1334N	3300N
NECK COMPRESSION			609N	4000N
NECK SHEAR FORWARD			987 N	3100N
NECK SHEAR REARWARD			488N	3100N
NECK TENSION DUR ASSESS			0.40	1.00
NECK COMPRESSION DUR ASSESS			0.34	1.00
NECK SHEAR FWD DUR ASSESS			0.32	1.00
NECK SHEAR RWD DUR ASSESS			0.18	1.00
CHEST ACCEL			19G	60G
† CHEST COMPRESSION W/O SH BELT			2.9MM	65.0MM †
† CHEST COMPRESSION W/ SH BELT			2.9MM	50.0MM †
CHEST VISCOUS CRITERIA			0.00M/SEC	1.00M/SEC
FEMUR COMP, LEFT			682N	10000N
FEMUR COMP, RIGHT			629N	10000N
FEMUR DURATION ASSESS, LEFT			0.08	1.00
FEMUR DURATION ASSESS, RIGHT			0.07	1.00
TIBIA/FEMUR DISP, LEFT			*	15.0MM
TIBIA/FEMUR DISP, RIGHT			*	15.0MM
KNEE CLEVIS, LEFT INSIDE			*	4000N
KNEE CLEVIS, LEFT OUTSIDE			*	4000N
KNEE CLEVIS, RIGHT INSIDE			*	4000N
KNEE CLEVIS, RIGHT OUTSIDE			*	4000N
TIBIA COMP, LEFT			*	8000N
TIBIA COMP, RIGHT			*	8000N
TIBIA MOM, UPPER, LEFT			*	225NM
TIBIA MOM, UPPER, RIGHT			*	225NM
TIBIA MOM, LOWER, LEFT			*	225NM
TIBIA MOM, LOWER, RIGHT			*	225NM
LEG INDEX, UPPER LEFT			*	1.00
LEG INDEX, UPPER RIGHT			*	1.00
LEG INDEX, LOWER LEFT			*	1.00
LEG INDEX, LOWER RIGHT			*	1.00

IARV - INJURY ASSESSMENT VALUE

IARV - INJURY ASSESSMENT REFERENCE VALUE

* NOT MEASURED, THIS TEST

† RESTRAINT SYSTEM DEPENDENT. CHOOSE
 VALUE THAT APPLIES TO THIS TEST.

PROCESSED 12/18/1997 14:23 V2.07

RIGHT FRONT
 ANTHROPOMORPHIC TEST DEVICE SUMMARY DATA
 LTV MDB TO STATIONARY VEHICLE 80.9KM/H

C11818 L.REAR IMP 70% OVERLAP
 SC 8W9182D 4-DOOR

ATD TYPE: GM50H
 TEST DATE: 12/18/1997

MEASURED QUANTITY	100% OF IARV	150% OF IARV	IARV VALUE	IARV
HIC, LIMITED TO 15 MS			1370	1000
HIC, LIMITED TO 36 MS			1370	1000
NECK FLEXION			84NM	190NM
NECK EXTENSION			18NM	57NM
NECK TENSION			937N	3300N
NECK COMPRESSION			2291N	4000N
NECK SHEAR FORWARD			138N	3100N
NECK SHEAR REARWARD			953 N	3100N
NECK TENSION DUR ASSESS			0.28	1.00
NECK COMPRESSION DUR ASSESS			0.58	1.00
NECK SHEAR FWD DUR ASSESS			0.07	1.00
NECK SHEAR RWD DUR ASSESS			0.31	1.00
CHEST ACCEL			28G	60G
† CHEST COMPRESSION W/O SH BELT			4.6MM	65.0MM †
† CHEST COMPRESSION W/ SH BELT			4.6MM	50.0MM †
CHEST VISCOUS CRITERIA			0.01M/SEC	1.00M/SEC
FEMUR COMP, LEFT			606N	10000N
FEMUR COMP, RIGHT			522N	10000N
FEMUR DURATION ASSESS, LEFT			0.07	1.00
FEMUR DURATION ASSESS, RIGHT			0.06	1.00
TIBIA/FEMUR DISP, LEFT			*	15.0MM
TIBIA/FEMUR DISP, RIGHT			*	15.0MM
KNEE CLEVIS, LEFT INSIDE			*	4000N
KNEE CLEVIS, LEFT OUTSIDE			*	4000N
KNEE CLEVIS, RIGHT INSIDE			*	4000N
KNEE CLEVIS, RIGHT OUTSIDE			*	4000N
TIBIA COMP, LEFT			*	8000N
TIBIA COMP, RIGHT			*	8000N
TIBIA MOM, UPPER, LEFT			*	225NM
TIBIA MOM, UPPER, RIGHT			*	225NM
TIBIA MOM, LOWER, LEFT			*	225NM
TIBIA MOM, LOWER, RIGHT			*	225NM
LEG INDEX, UPPER LEFT			*	1.00
LEG INDEX, UPPER RIGHT			*	1.00
LEG INDEX, LOWER LEFT			*	1.00
LEG INDEX, LOWER RIGHT			*	1.00

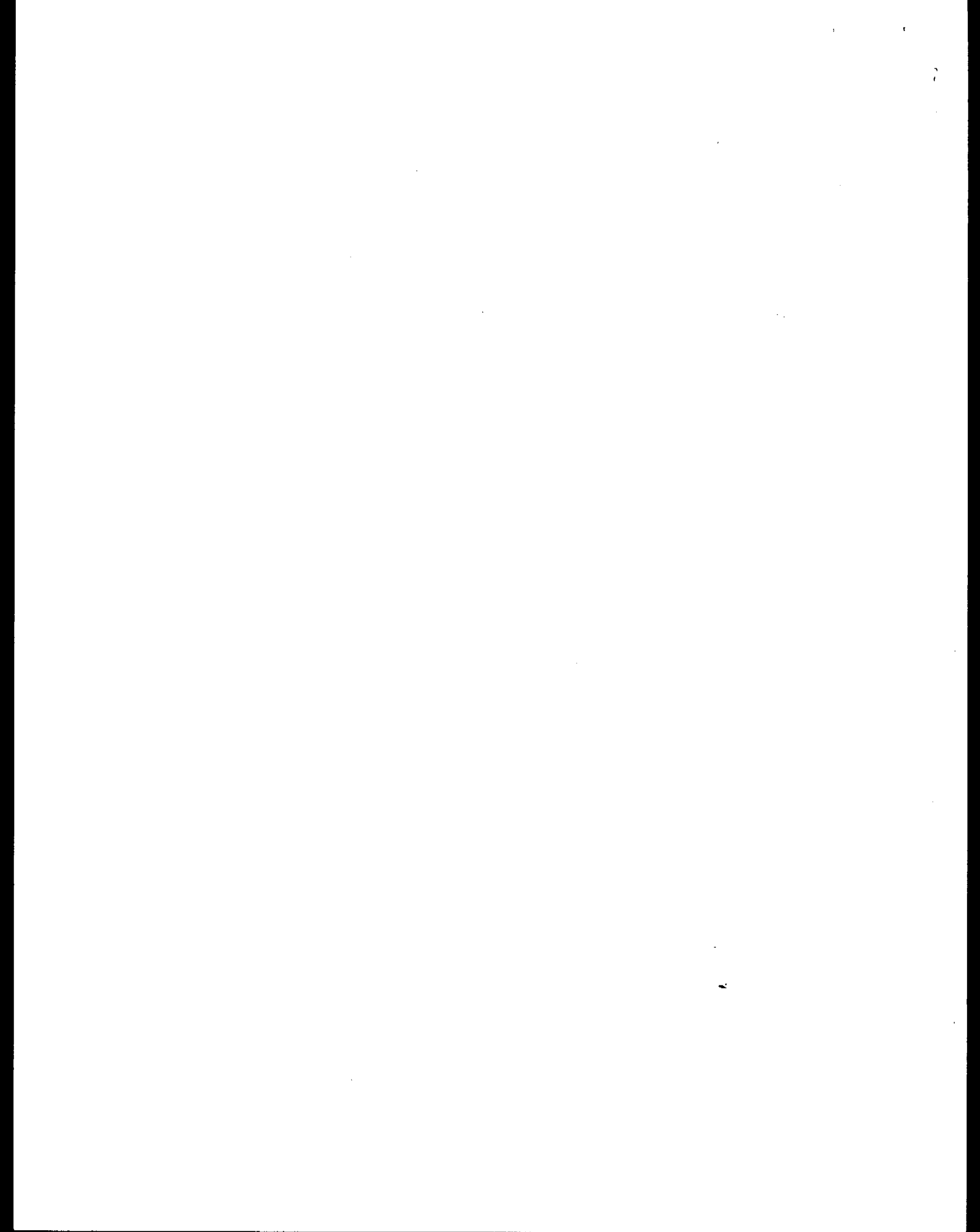
IARV - INJURY ASSESSMENT VALUE

IARV - INJURY ASSESSMENT REFERENCE VALUE

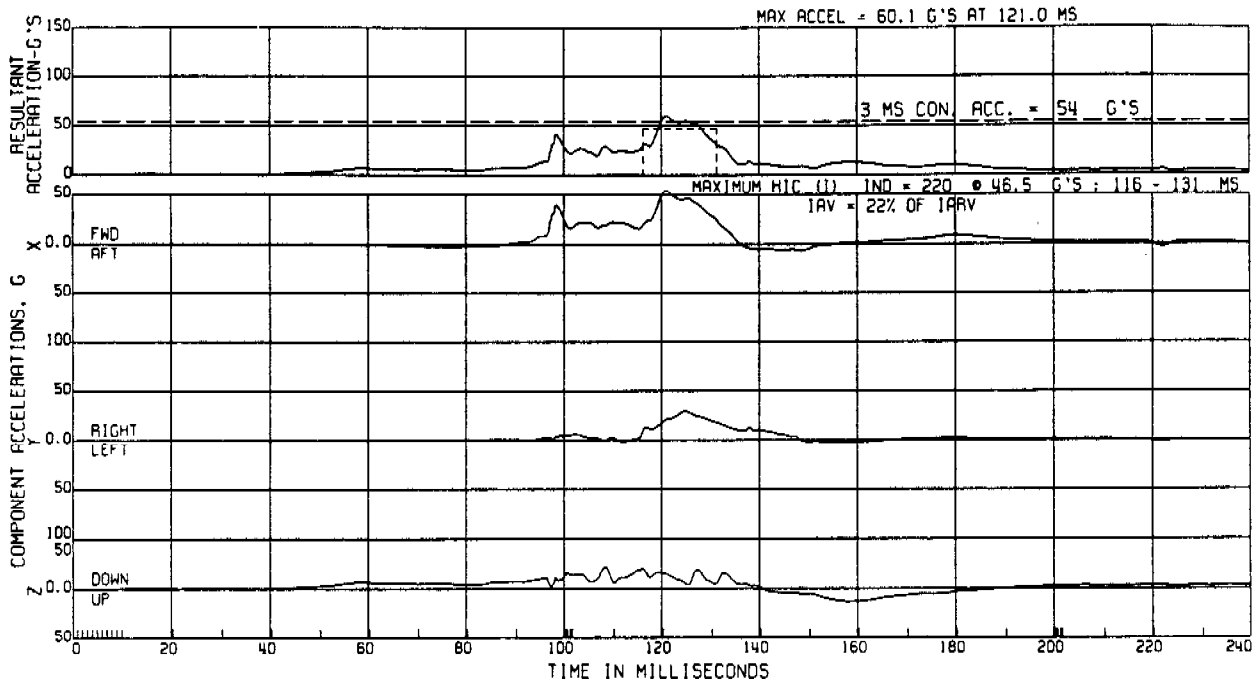
PROCESSED 12/18/1997 14:23 V2.07

* NOT MEASURED, THIS TEST

† RESTRAINT SYSTEM DEPENDENT. CHOOSE
 VALUE THAT APPLIES TO THIS TEST.

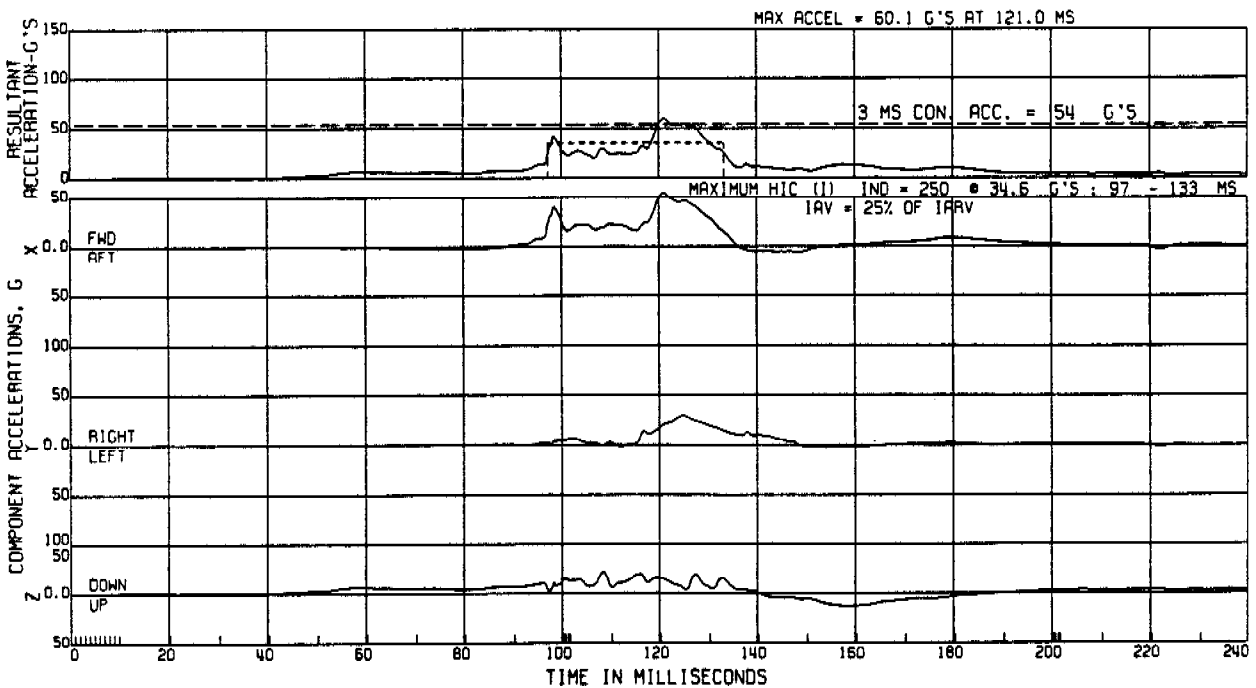


C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR L. FRT HEAD ACCEL. ATD TYPE: GM50H
 ELEC DATA, SAE CLASS 1000 (HIC I LIMITED TO 15MS) TEST DATE:12/18/1997



1 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR L. FRT HEAD ACCEL. ATD TYPE: GM50H
 ELEC DATA, SAE CLASS 1000 (HIC I LIMITED TO 36MS) TEST DATE:12/18/1997

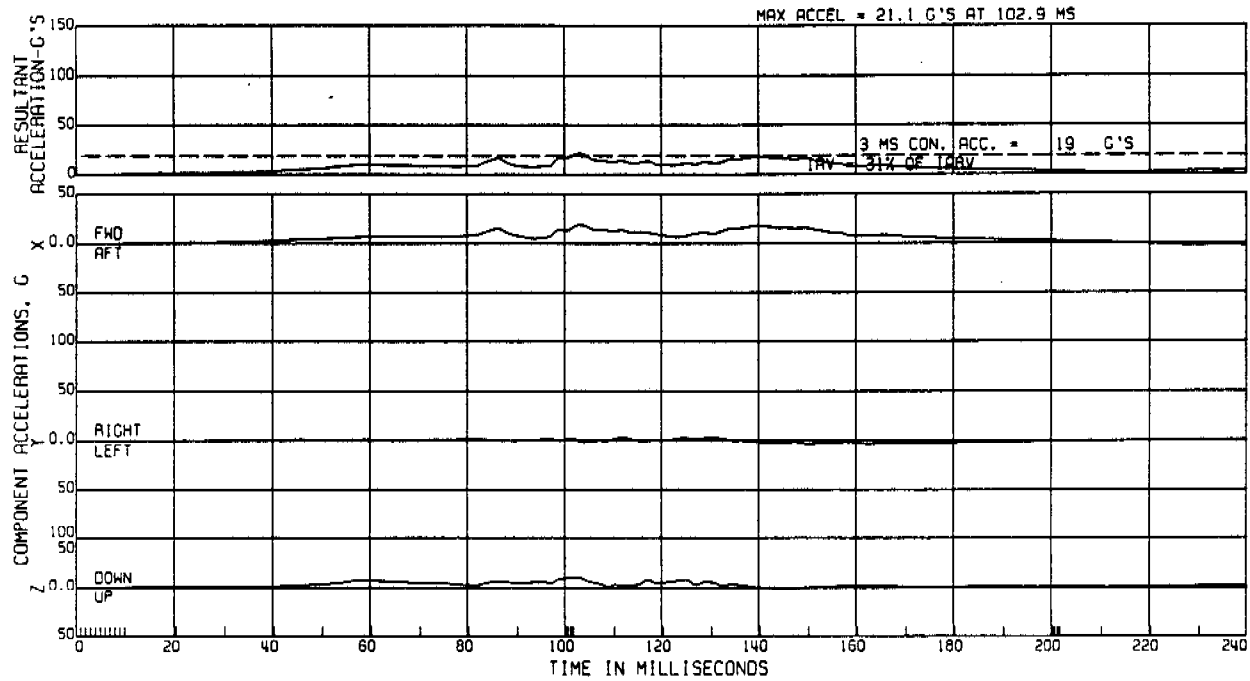


C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000A
ELEC DATA, SAE CLASS 180

L. FRT CHEST ACCEL.

ATD TYPE: GMS0H
TEST DATE: 12/18/1997



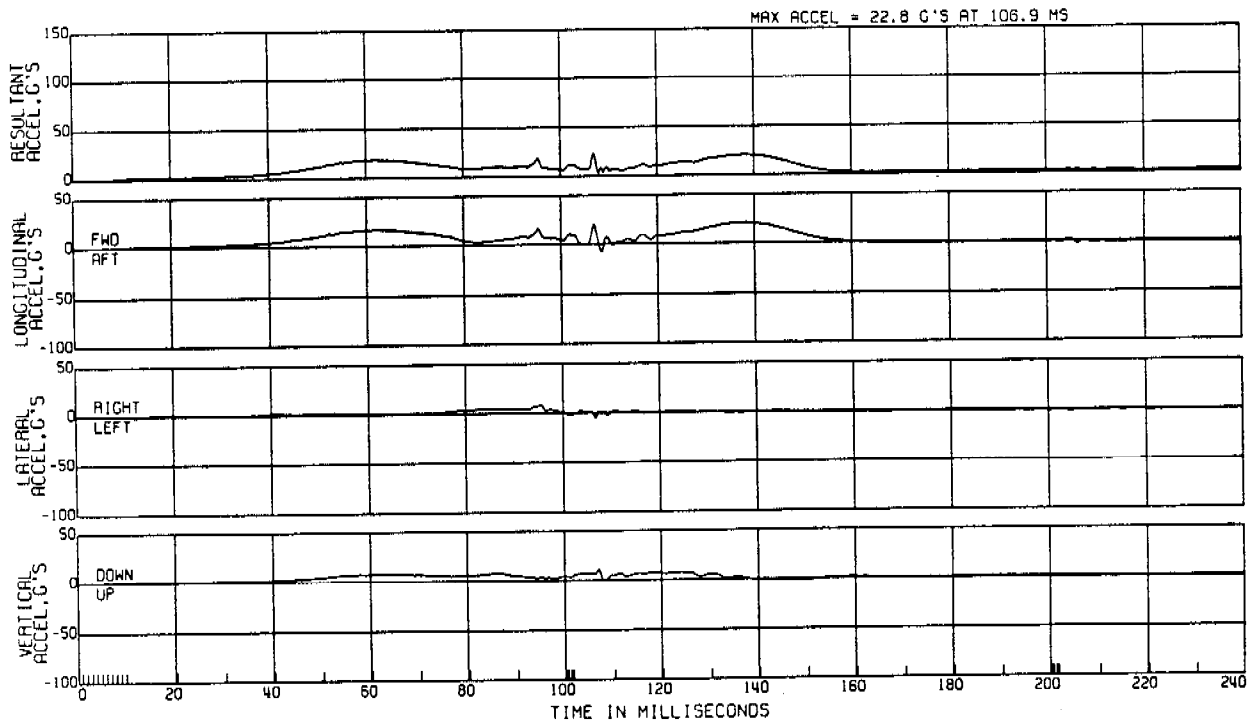
3 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000A
ELEC DATA, SAE CLASS 1000

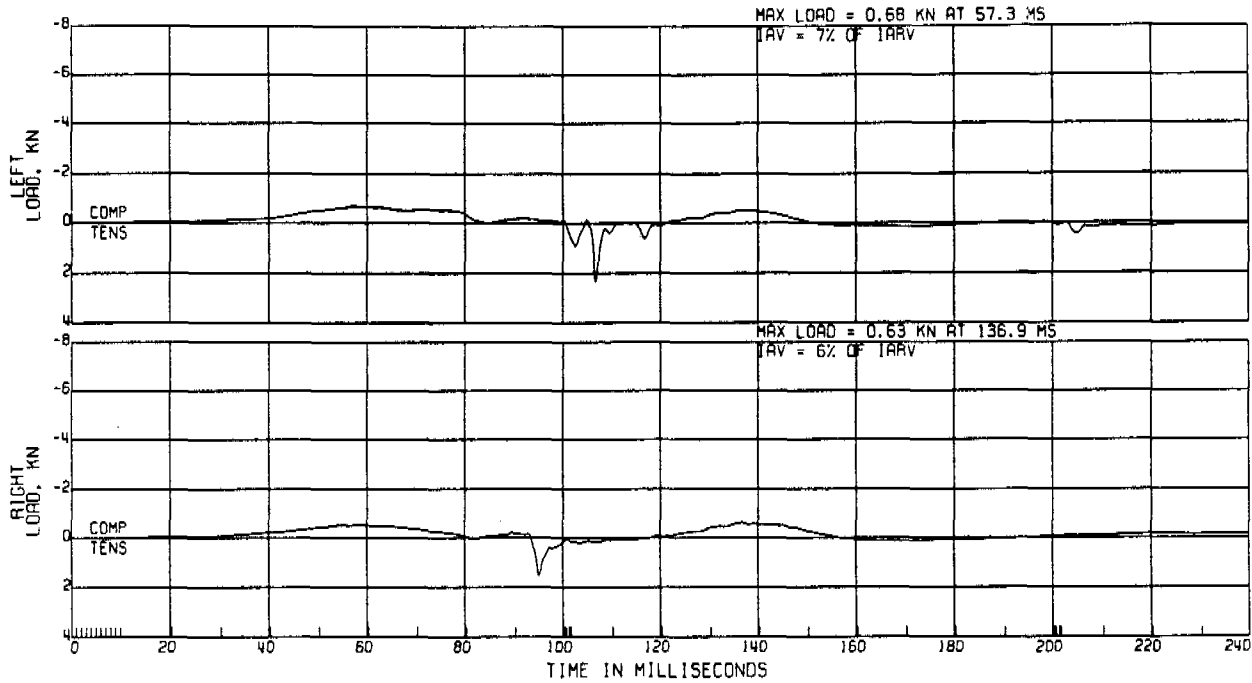
L. FRT PELVIC ACCEL.

ATD TYPE: GMS0H
TEST DATE: 12/18/1997



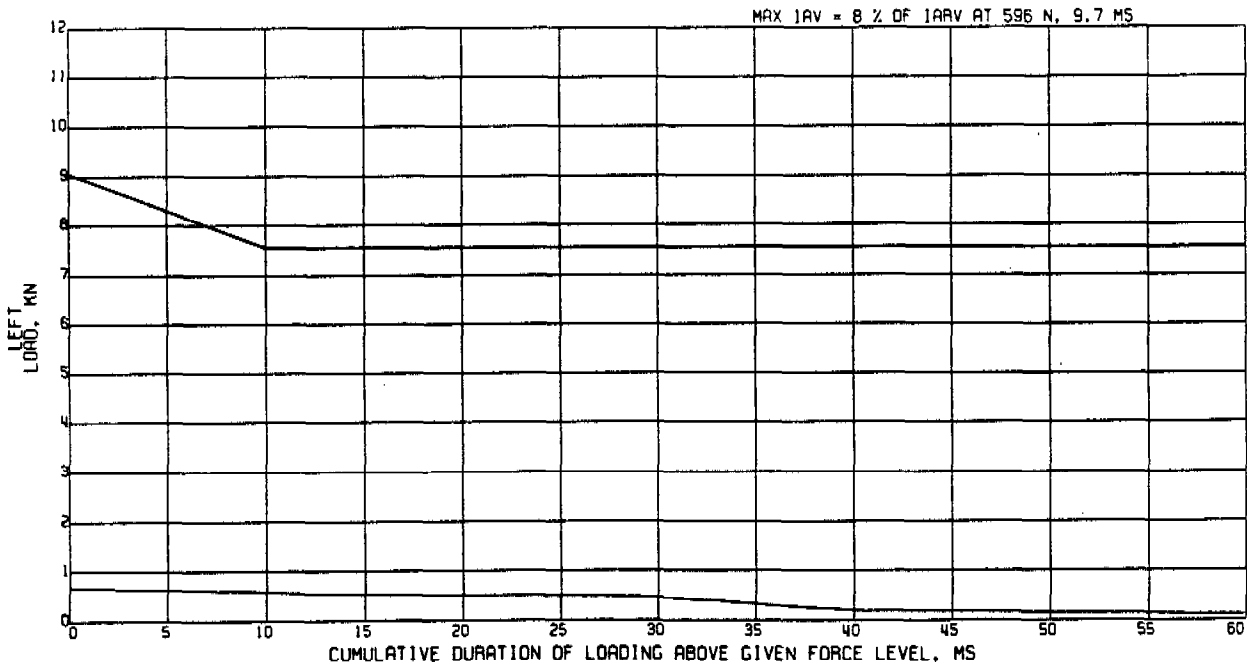
4 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR L. FRT FEMUR LOAD ATD TYPE: GM50H
 ELEC DATA, SAE CLASS 600 TEST DATE: 12/18/1997



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C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR L. FRT FEMUR LOAD ATD TYPE: GM50H
 ELEC DATA, SAE CLASS 600 DURATION ASSESSMENT TEST DATE: 12/18/1997



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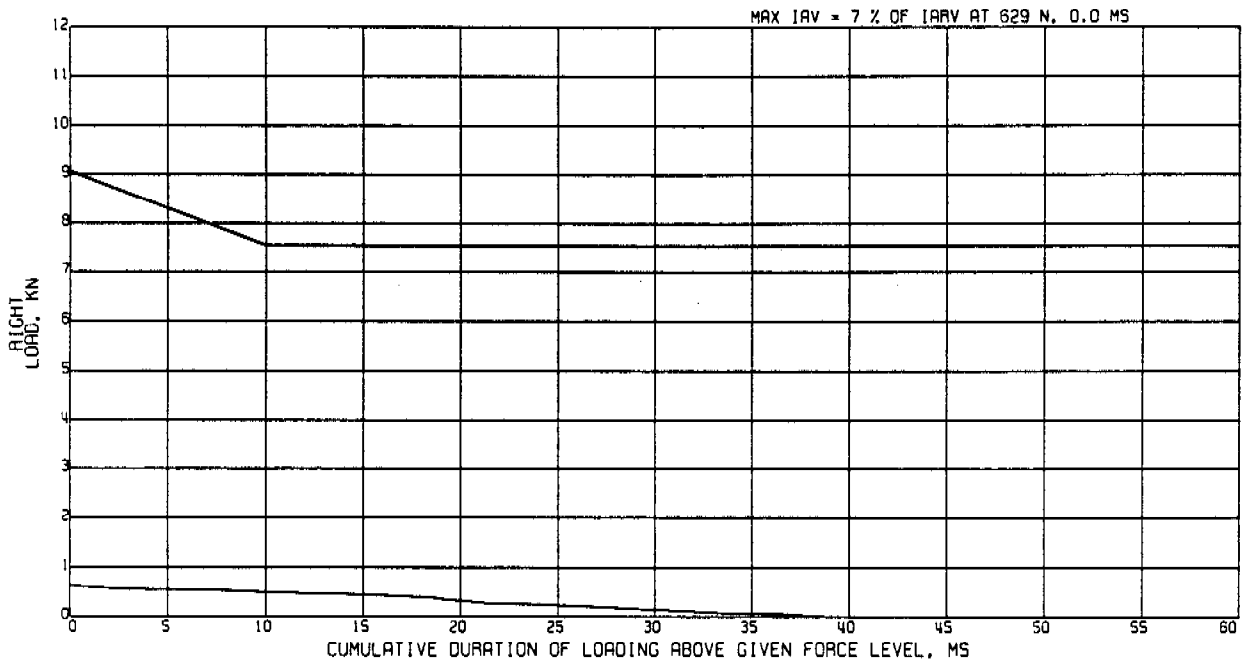
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 600

L. FAT FEMUR LOAD
DURATION ASSESSMENT

ATD TYPE: GM50H
TEST DATE:12/18/1997



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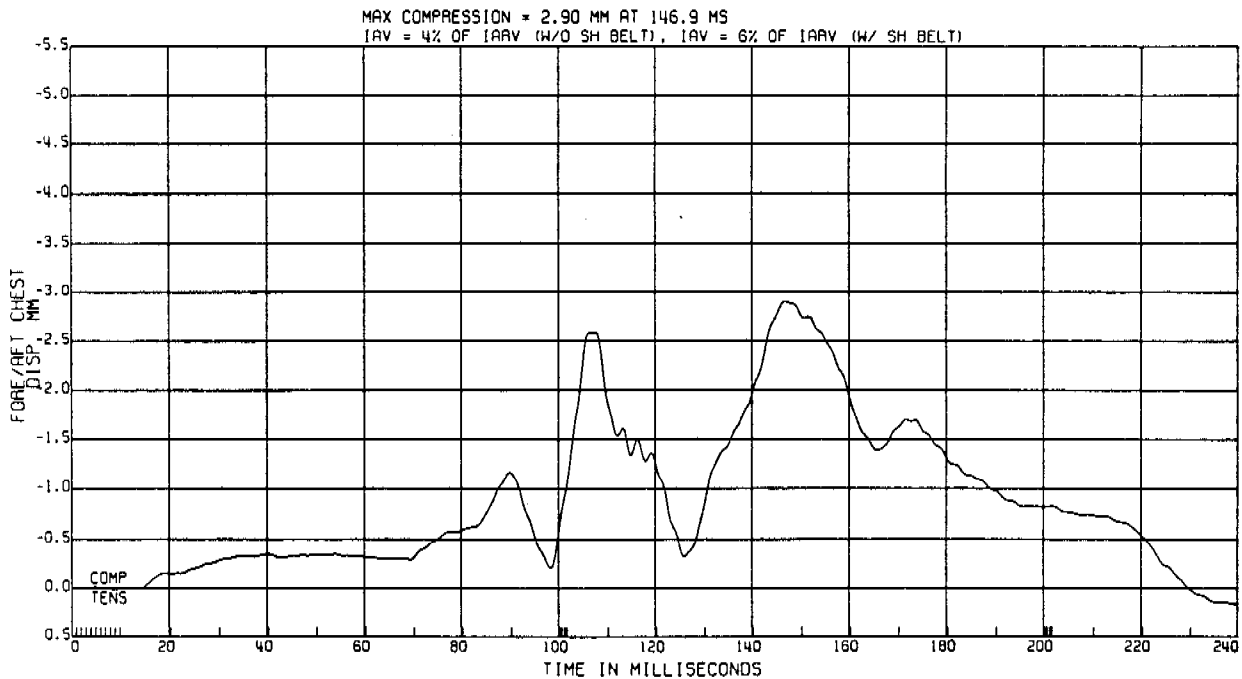
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 180

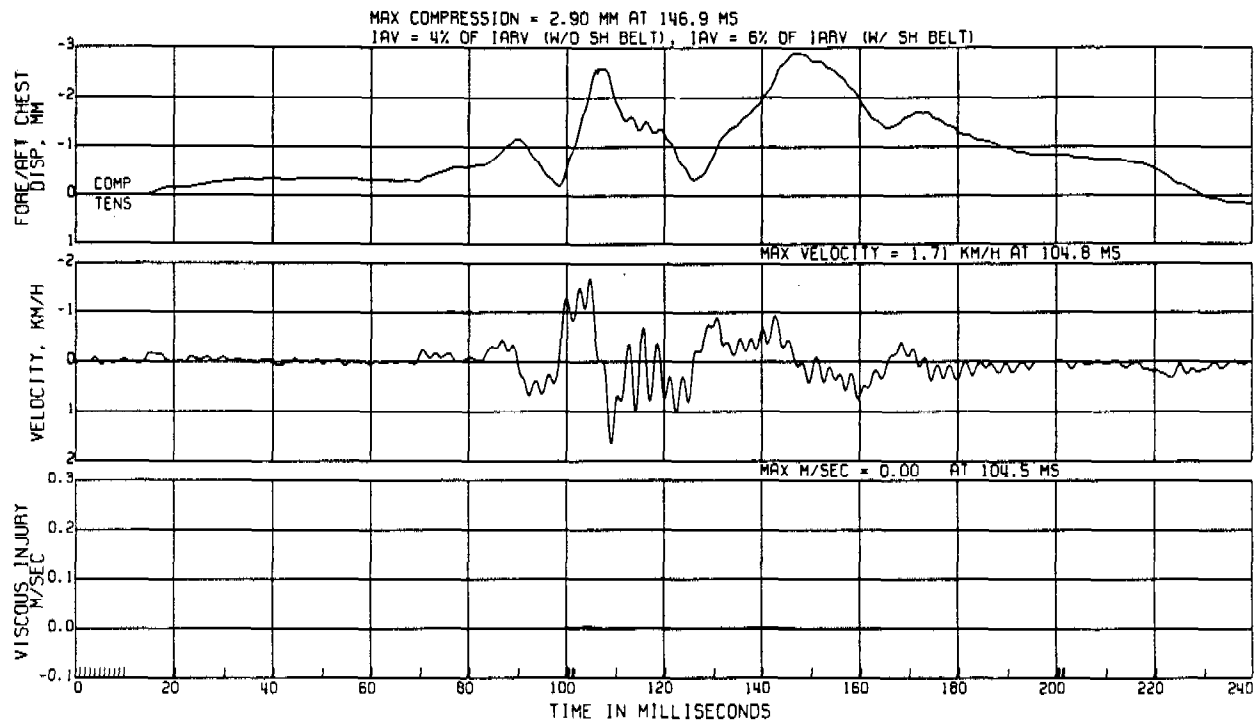
L. FAT CHEST DISP, TEMP AT 67.2°F
NORMALIZED TO 70.7°F & PART 572 CORRIDOR

ATD TYPE: GM50H
TEST DATE:12/18/1997



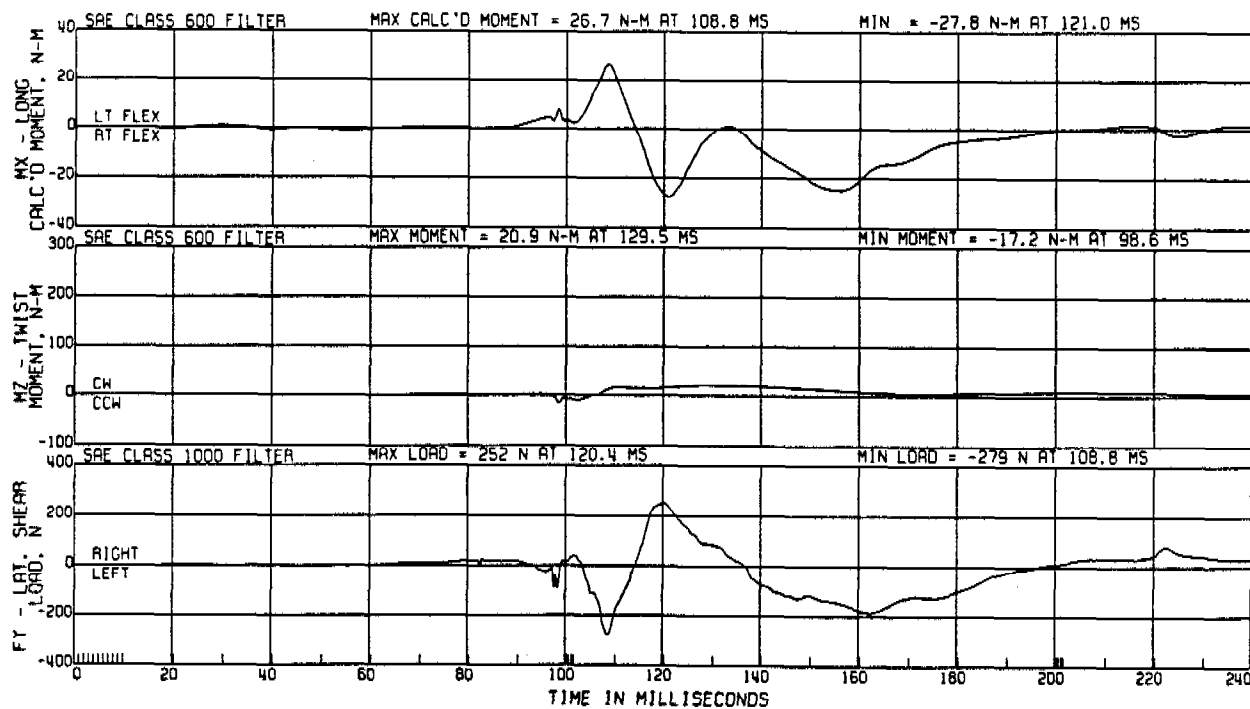
8 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR L. FRT CHEST COMPRESSIVE DISP. ATD TYPE: GM50H
 ELEC DATA, SAE CLASS 180 NORMALIZED, W/CALC VEL & VISCOUS INJURY TEST DATE:12/18/1997

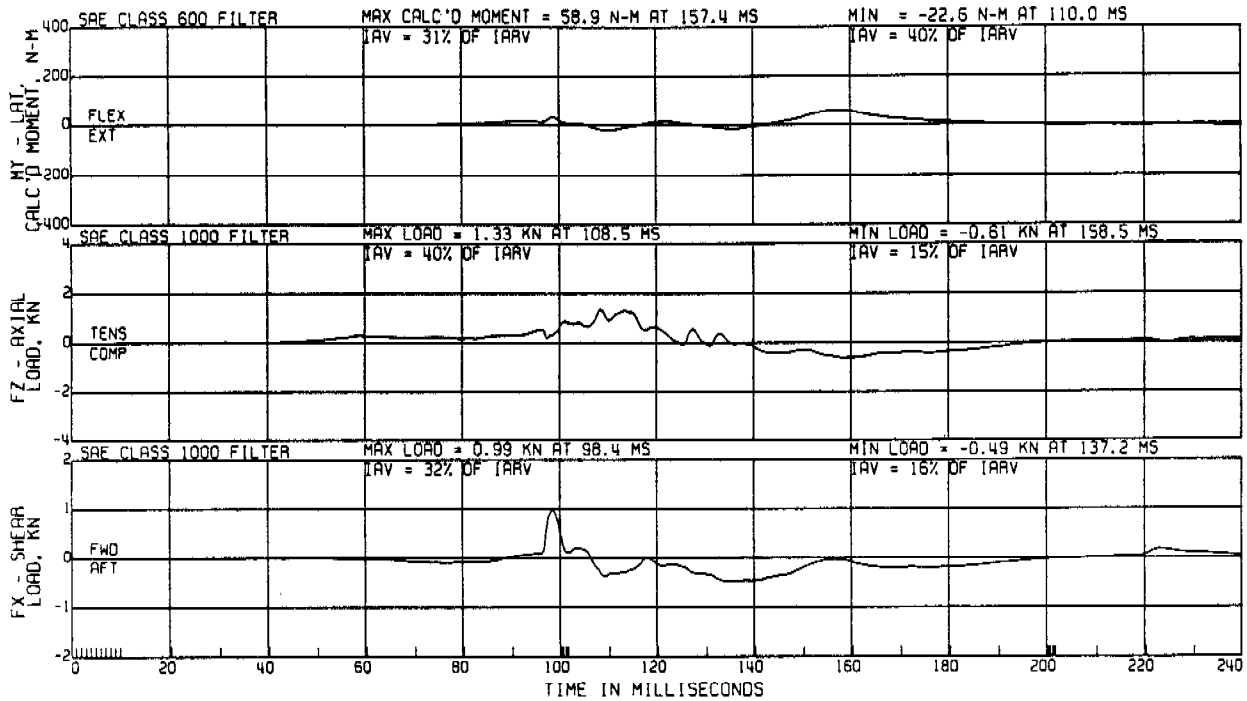


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C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR L. FRT NECK LOADING ON HEAD, UPPER LOAD ATD TYPE: GM50H
 ELEC DATA L. FRT NECK LOADING ON HEAD TEST DATE:12/18/1997

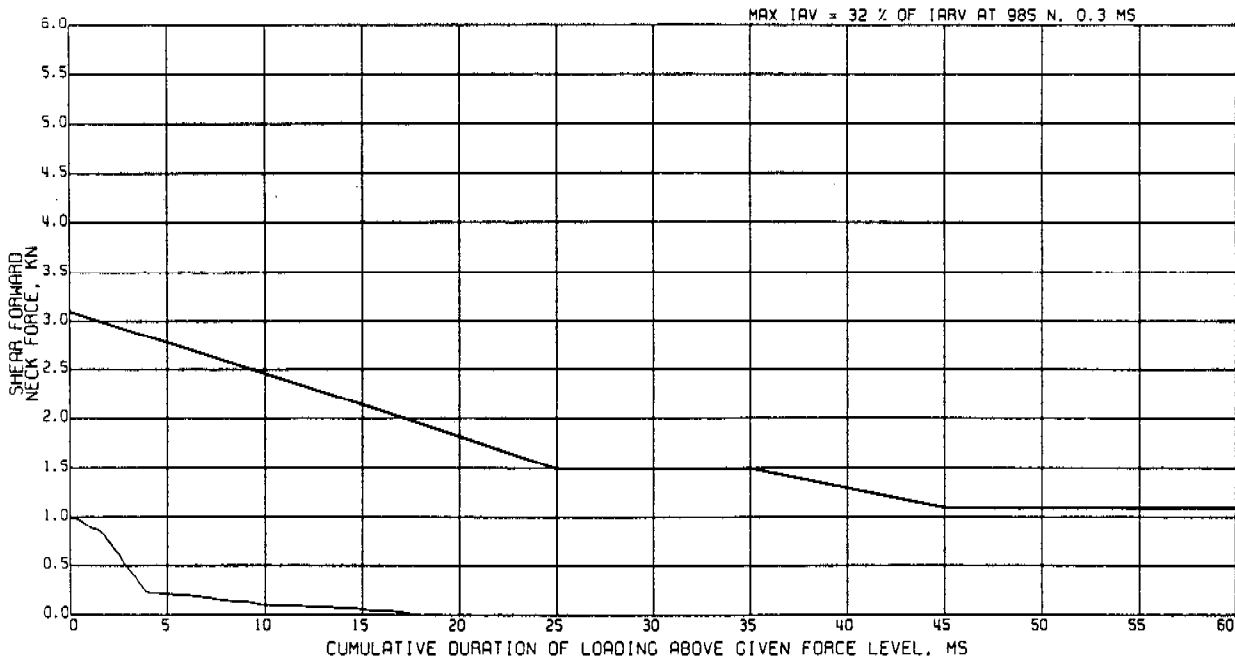


C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000A NECK LOADING ON HEAD ATD TYPE: GMS0H
 ELEC DATA L. FAT NECK LOADING ON HEAD TEST DATE:12/18/1997



11 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000A FORWARD NECK SHEAR ON HEAD, ATD TYPE: GMS0H
 ELEC DATA, SAE CLASS 1000 L. FAT INJURY REFERENCE TEST DATE:12/18/1997



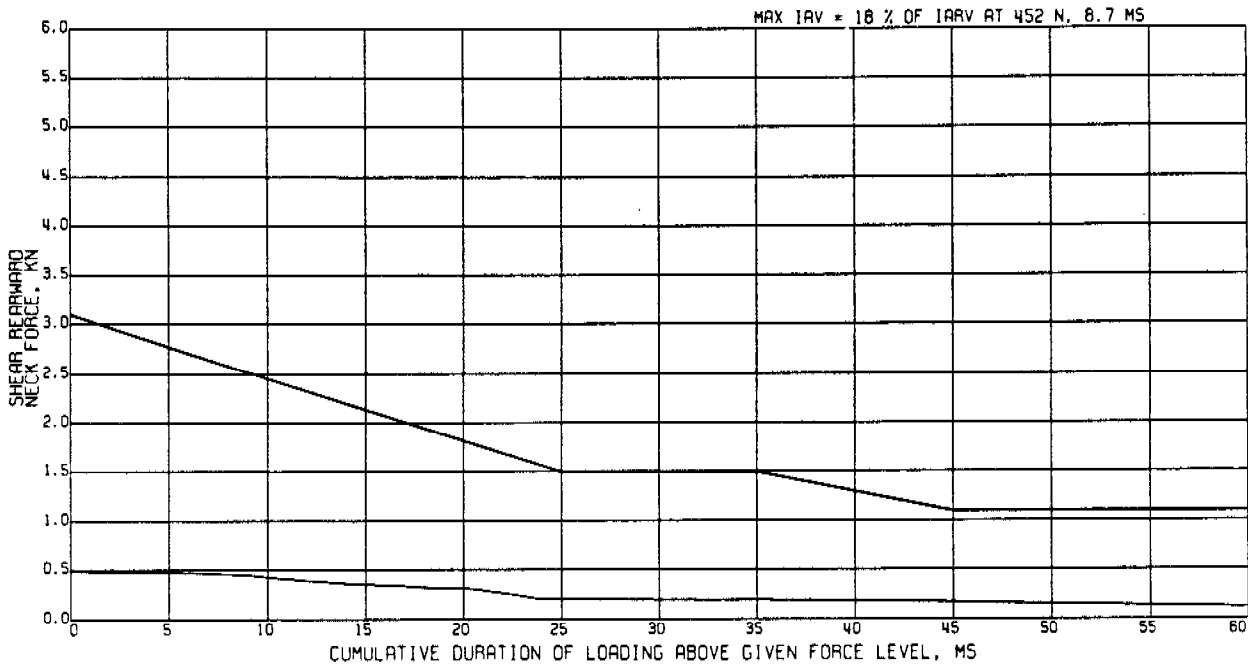
12 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

REARWARD NECK SHEAR ON HEAD,
L. FRT INJURY REFERENCE

ATD TYPE: GM50H
TEST DATE:12/18/1997



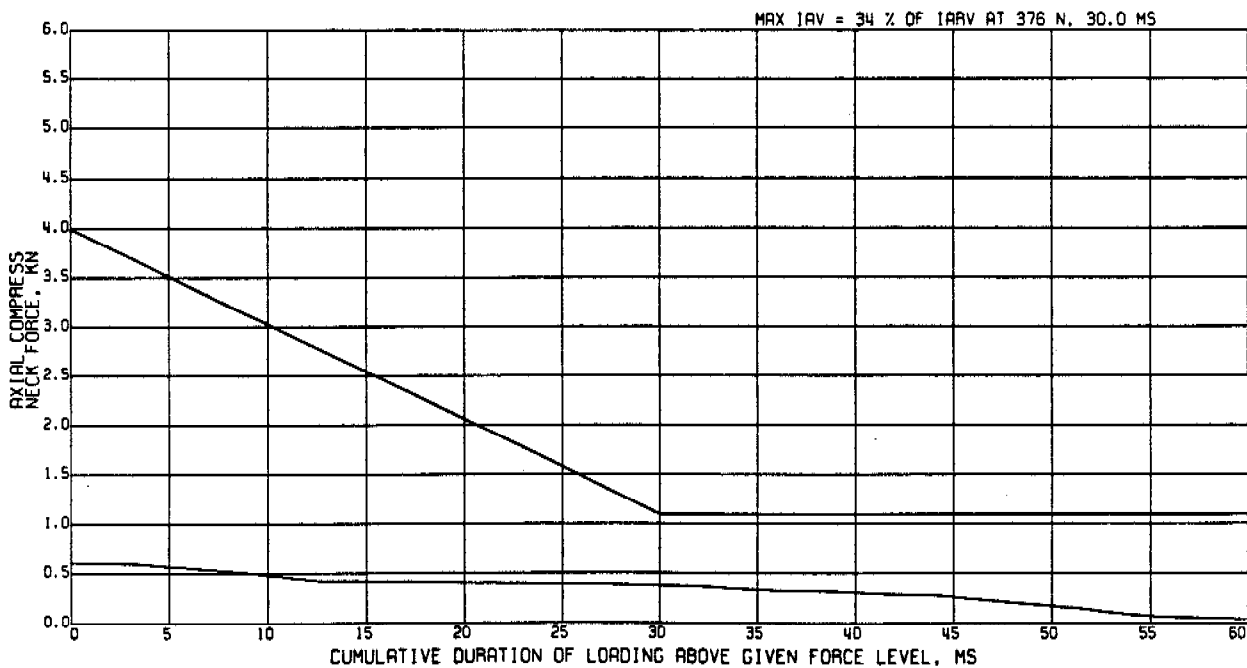
13 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

AXIAL COMPRESSION ON HEAD,
L. FRT INJURY REFERENCE

ATD TYPE: GM50H
TEST DATE:12/18/1997



C11818 L.REAR IMP 70% OVERLAP

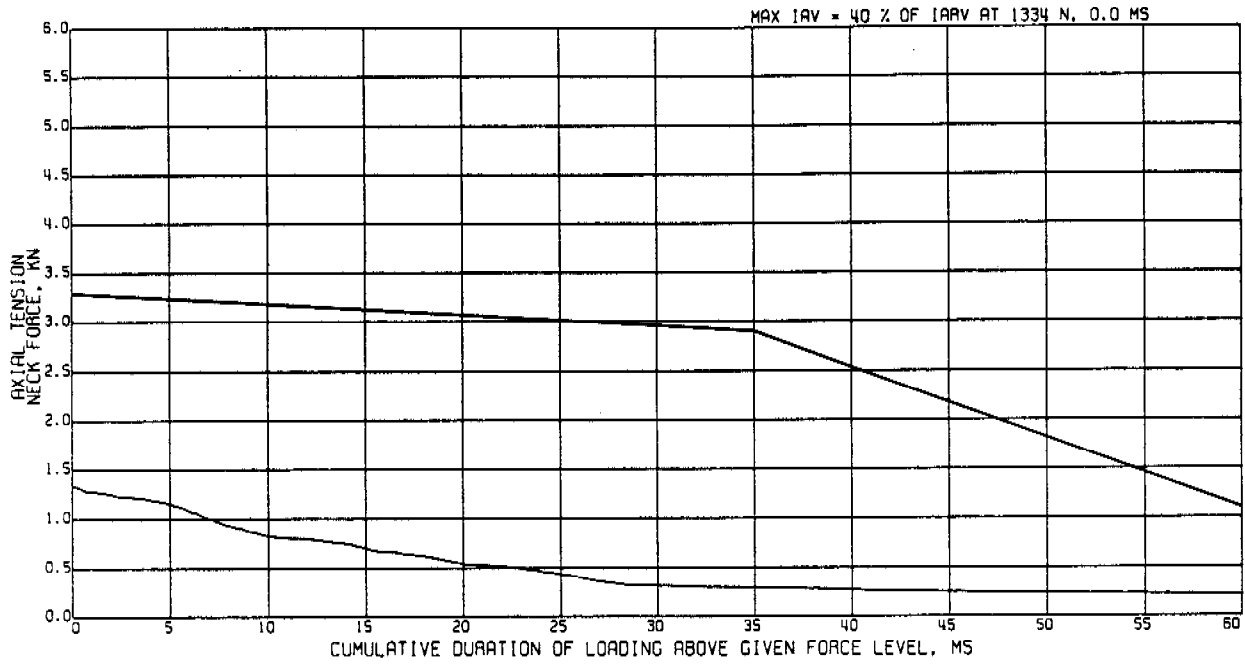
LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-000R
ELEC DATA, SAE CLASS 1000

AXIAL TENSION ON HEAD.
L. FAT INJURY REFERENCE

ATO TYPE: GM50H
TEST DATE:12/18/1997



15 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP

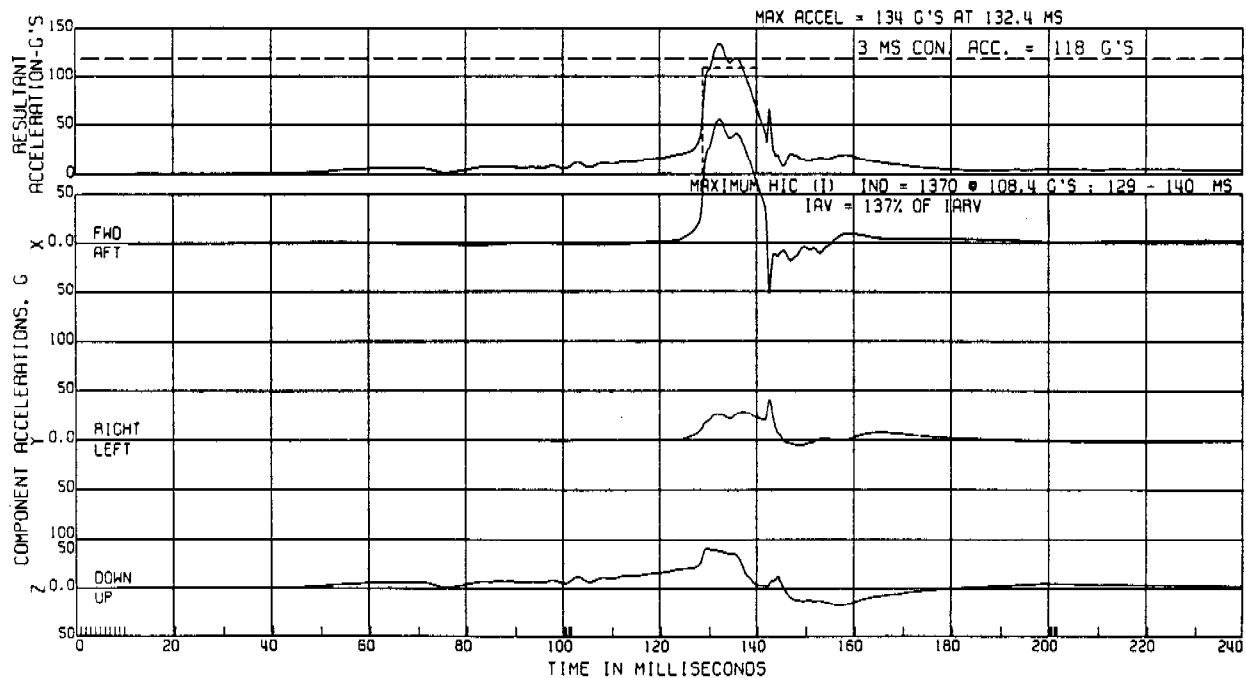
LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-000R
ELEC DATA, SAE CLASS 1000

R. FAT HEAD ACCEL.
(HIC I LIMITED TO 15MS)

ATO TYPE: GM50H
TEST DATE:12/18/1997



16 PROCESSED 12/18/1997 14:21 V2.07

C11818 L.REAR IMP 70% OVERLAP
SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

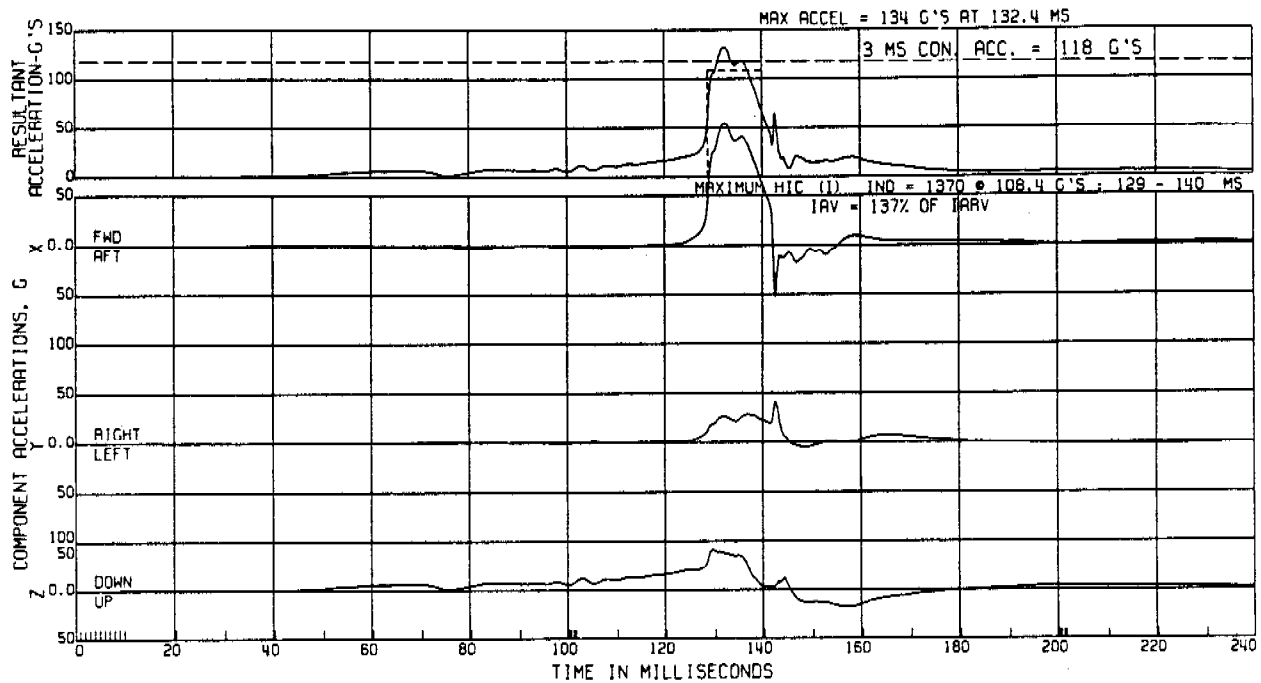
LTV MDB TO STATIONARY VEHICLE

80.9KM/H

R. FRT HEAD ACCEL.

ATD TYPE: GM50H
TEST DATE: 12/18/1997

(HIC 1 LIMITED TO 36MS)



17 PROCESSED 12/18/1997 14:21 V2.07

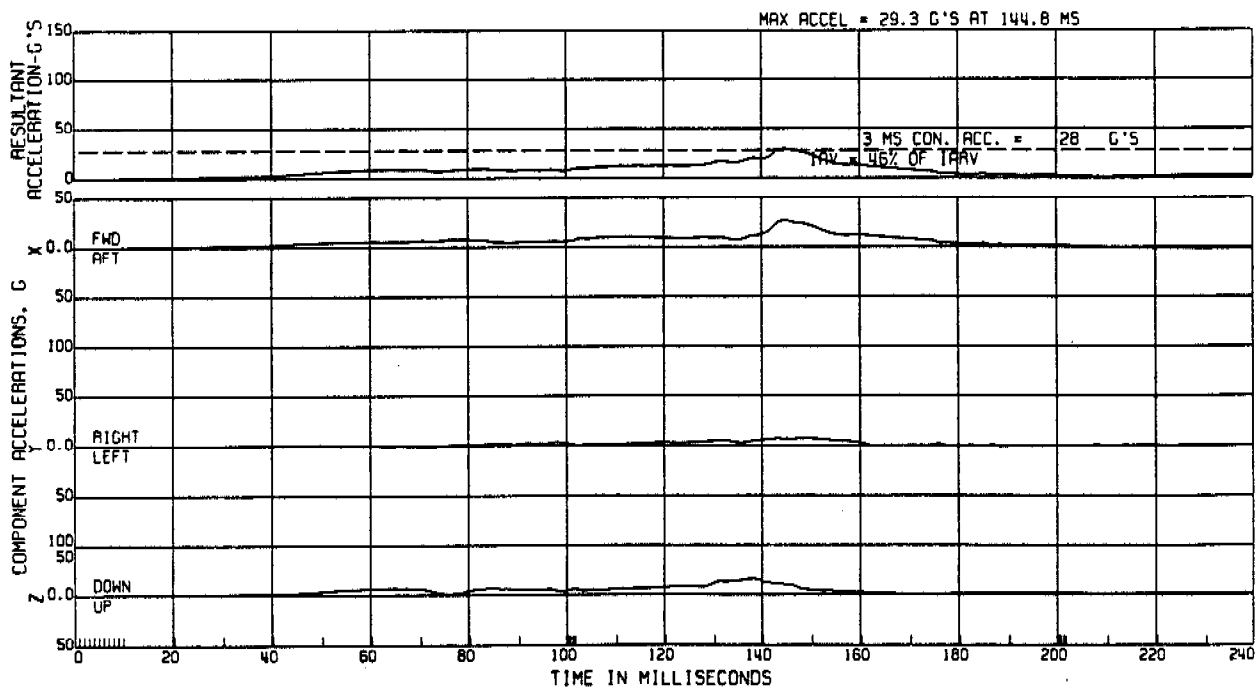
C11818 L.REAR IMP 70% OVERLAP
SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 180

LTV MDB TO STATIONARY VEHICLE

80.9KM/H

R. FRT CHEST ACCEL.

ATD TYPE: GM50H
TEST DATE: 12/18/1997



C11818 L.REAR IMP 70% OVERLAP

LTV MOB TO STATIONARY VEHICLE

80.9KM/H

SC

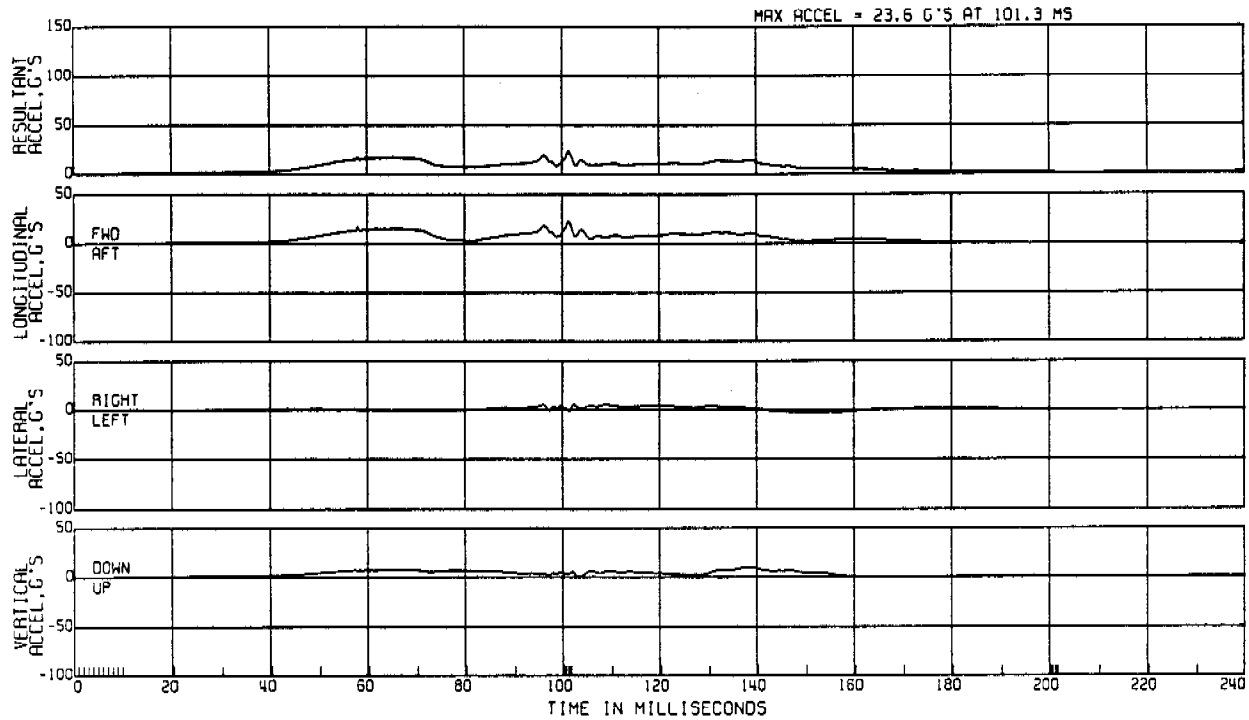
8W9182D 4-000R

R. FRT PELVIC ACCEL.

ATD TYPE: GM50H

TEST DATE:12/18/1997

ELEC DATA, SAE CLASS 1000



19 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP

LTV MOB TO STATIONARY VEHICLE

80.9KM/H

SC

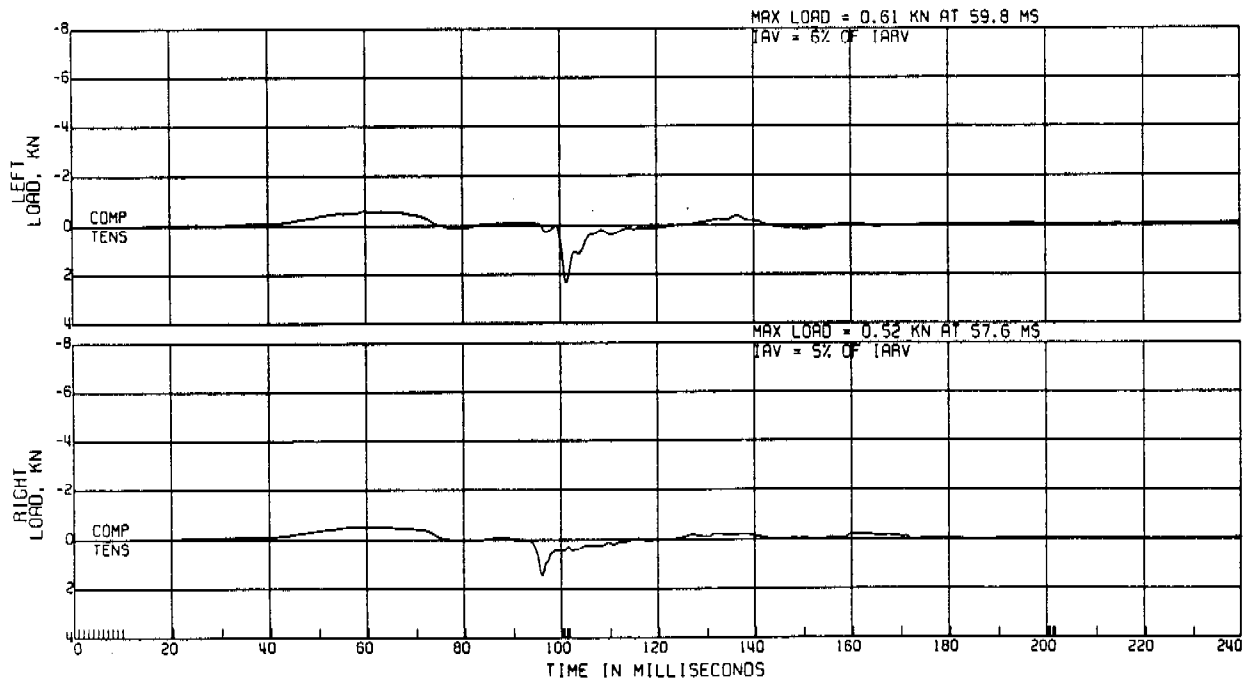
8W9182D 4-000R

R. FRT FEMUR LOAD

ATD TYPE: GM50H

TEST DATE:12/18/1997

ELEC DATA, SAE CLASS 600



20 PROCESSED 12/18/1997 14:22 V2.07

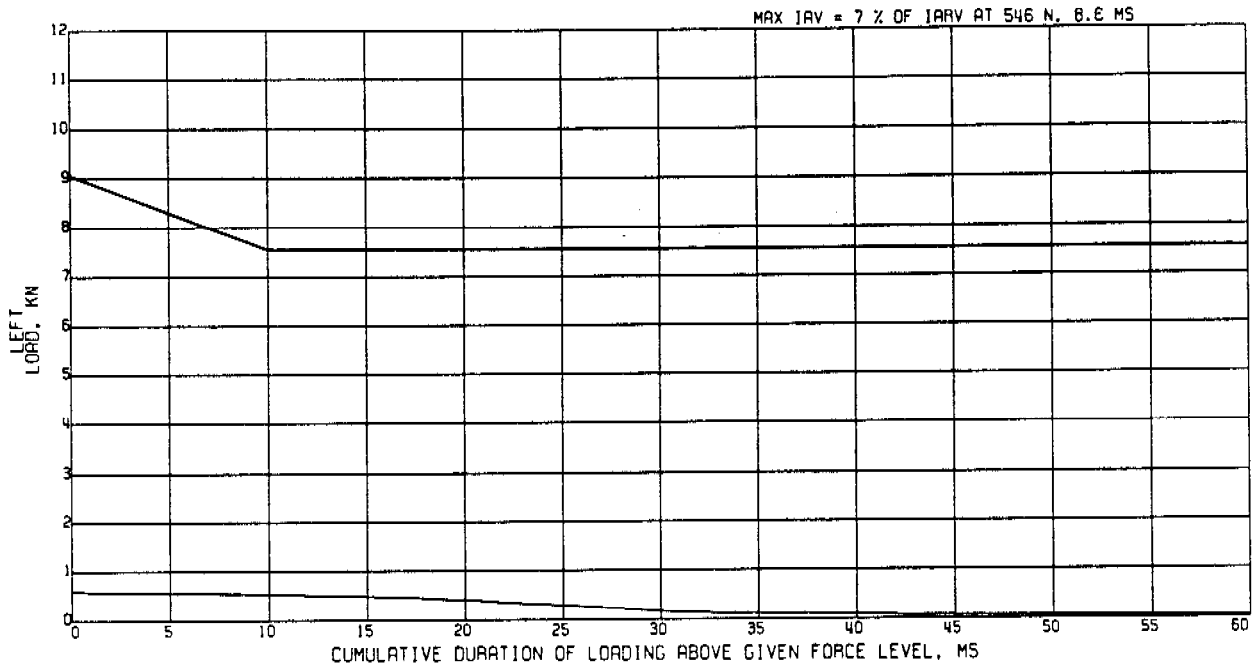
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 600

R. FRT FEMUR LOAD
DURATION ASSESSMENT

ATD TYPE: GMS0H
TEST DATE: 12/18/1997



21 PROCESSED 12/18/1997 14:22 V2.07

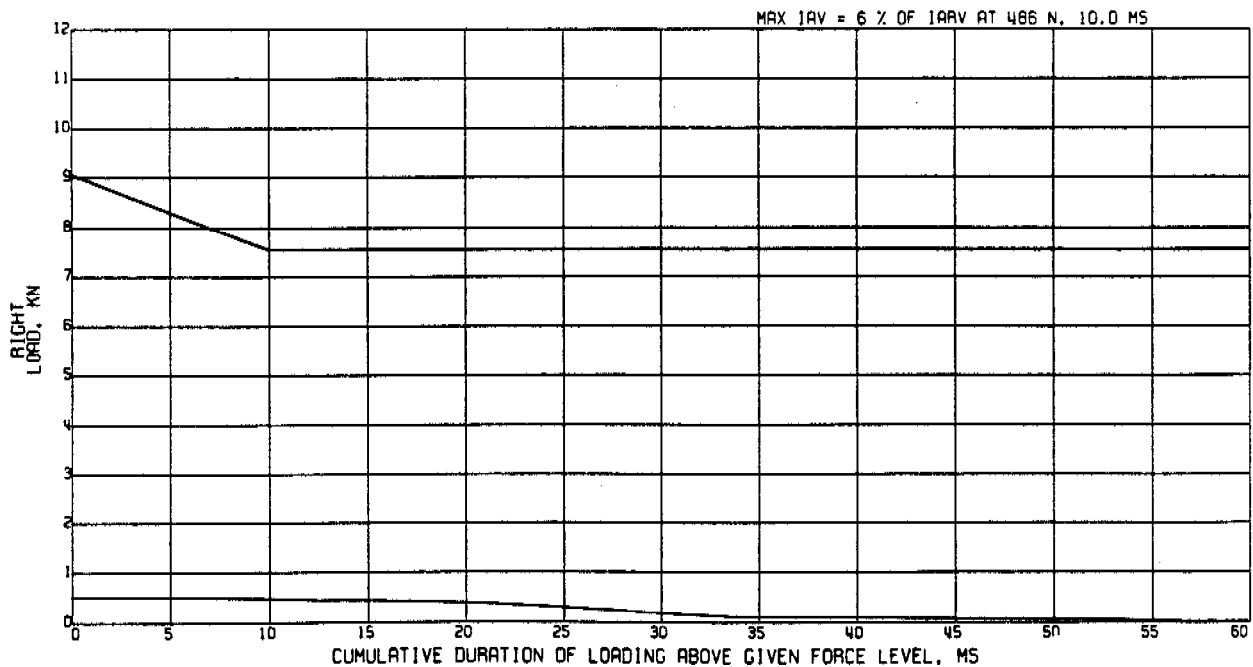
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 600

R. FRT FEMUR LOAD
DURATION ASSESSMENT

ATD TYPE: GMS0H
TEST DATE: 12/18/1997

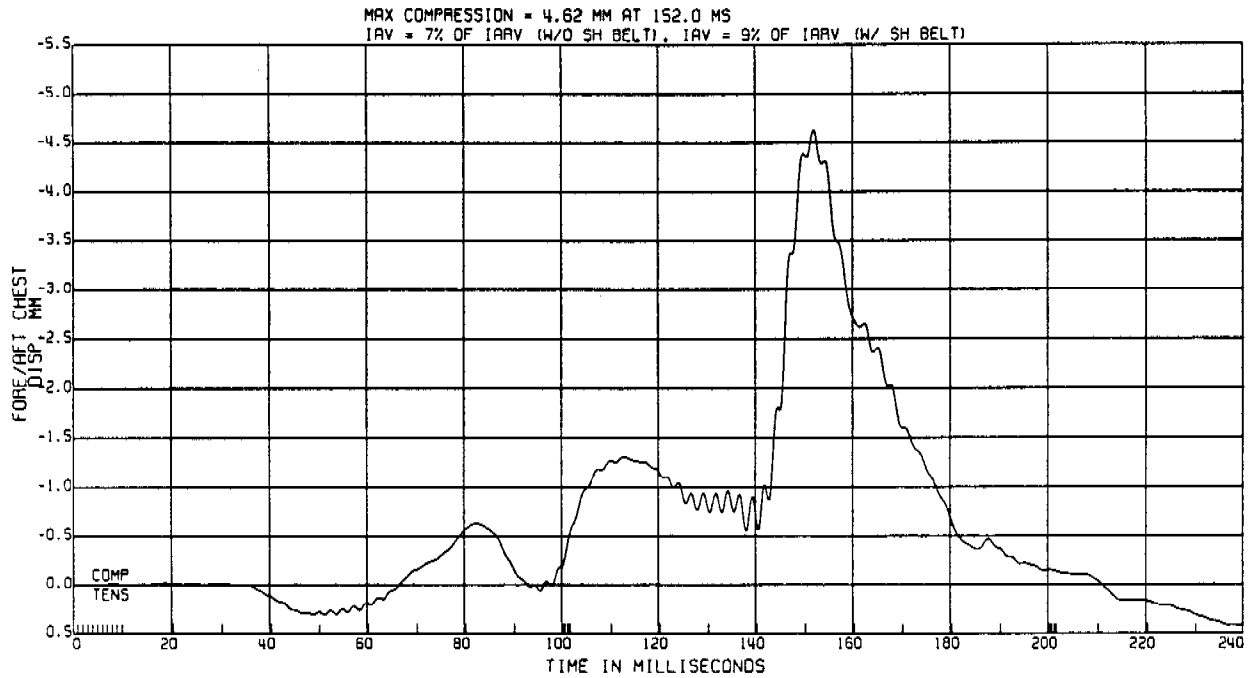


C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000R
ELEC DATA, SAE CLASS 180

R. FRT CHEST DISP, TEMP AT 67.0°F
NORMALIZED TO 70.7°F & PART 572 CORRIDOR

ATD TYPE: GM50H
TEST DATE: 12/18/1997



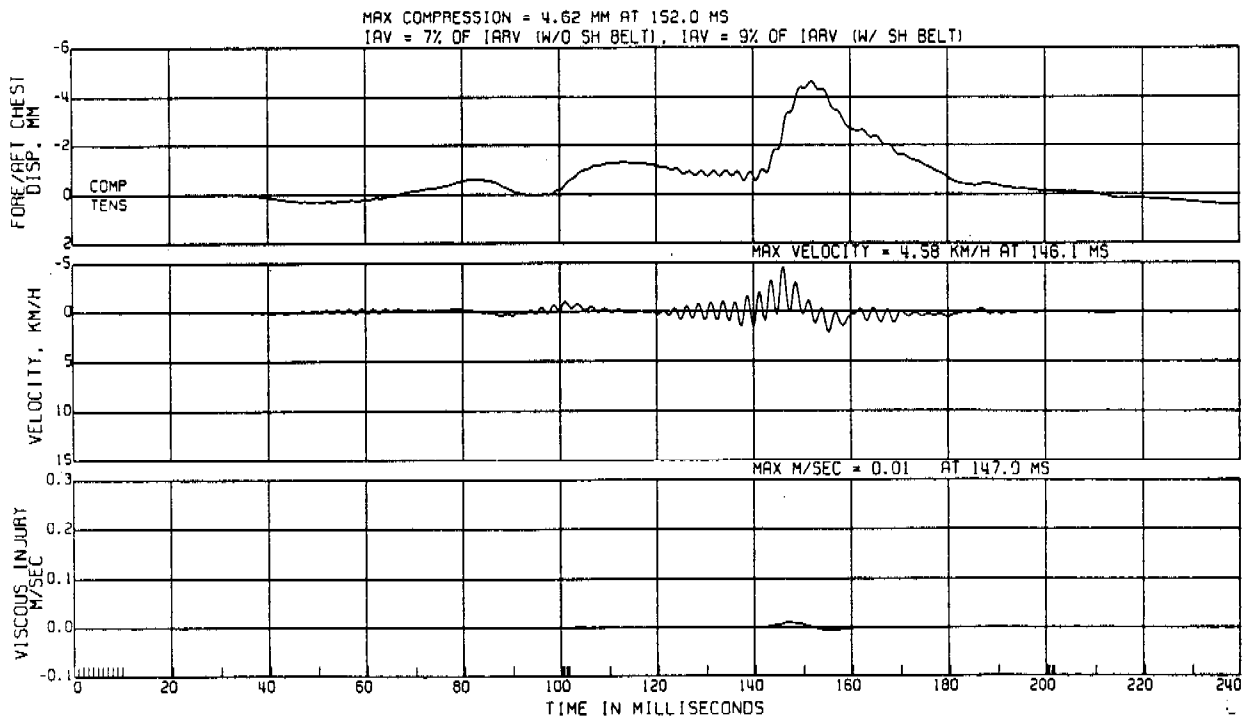
23 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000R
ELEC DATA, SAE CLASS 180

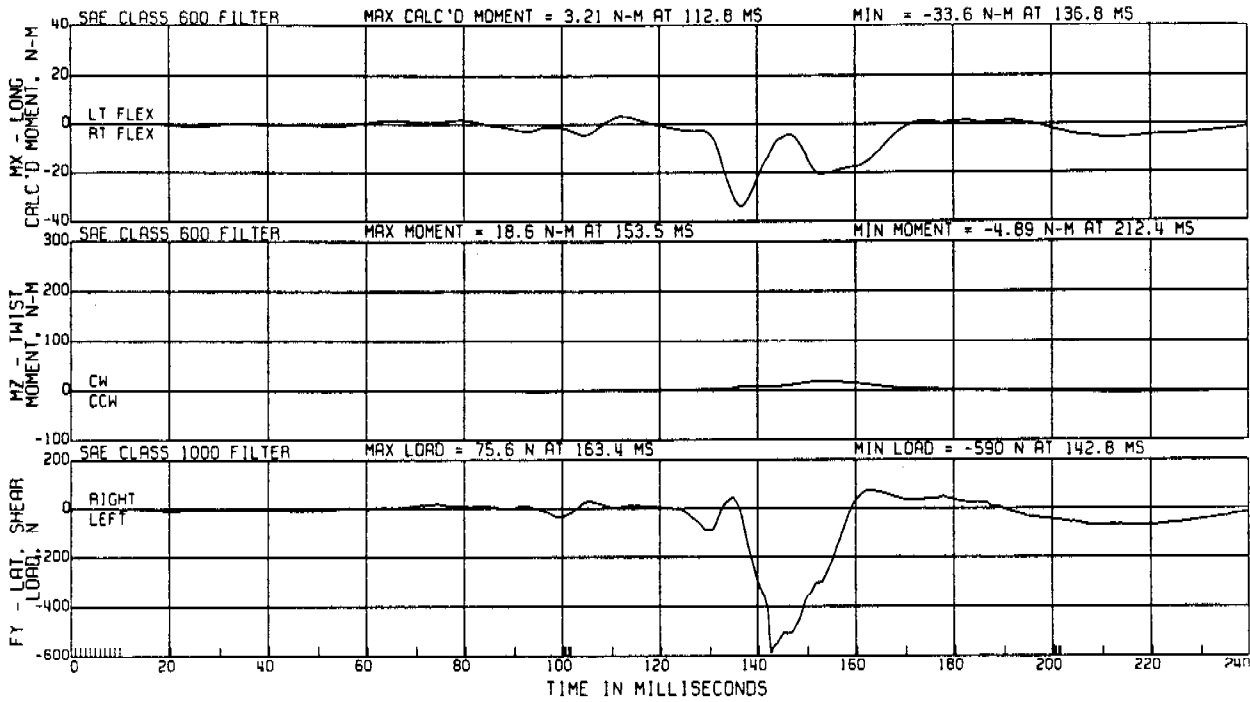
R. FRT CHEST COMPRESSIVE DISP.
NORMALIZED, W/CALC VEL & VISCOUS INJURY

ATD TYPE: GM50H
TEST DATE: 12/18/1997



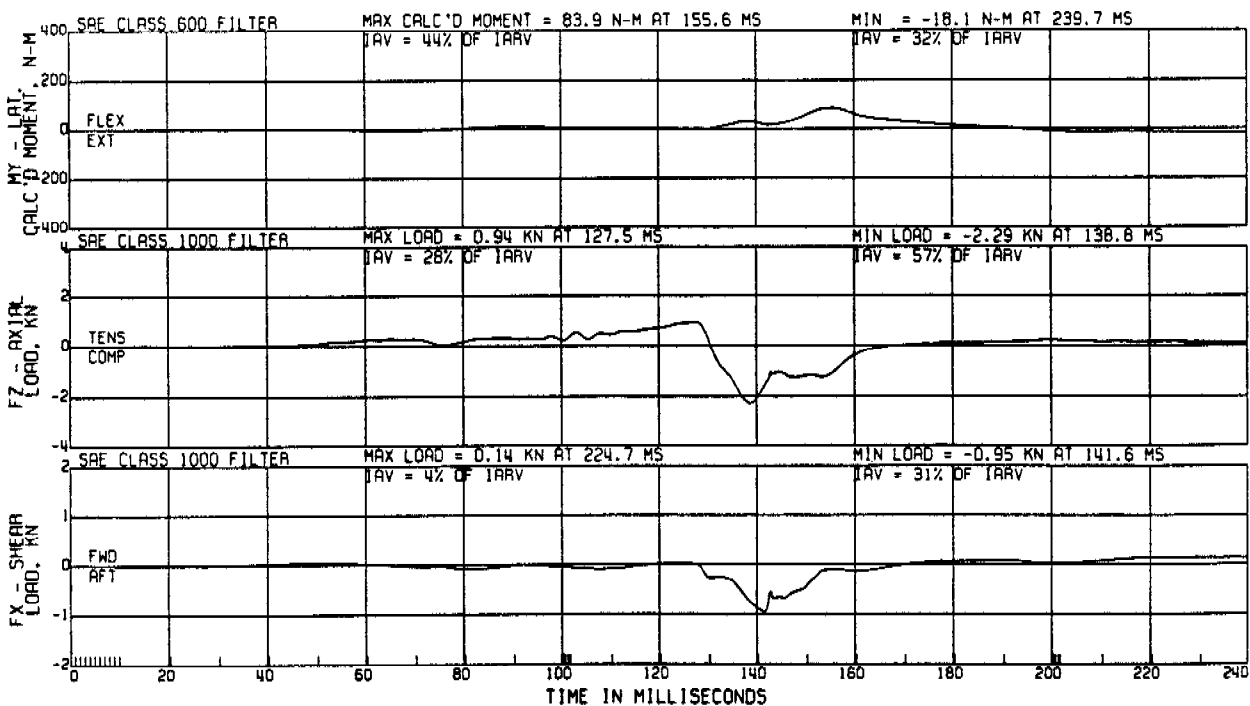
24 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR R. FRT NECK LOADING ON HEAD, UPPER LOAD ATD TYPE: GM50H
 ELEC DATA R. FRT NECK LOADING ON HEAD TEST DATE:12/18/1997



25 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR NECK LOADING ON HEAD ATD TYPE: GM50H
 ELEC DATA R. FRT NECK LOADING ON HEAD TEST DATE:12/18/1997



25 PROCESSED 12/18/1997 14:22 V2.07

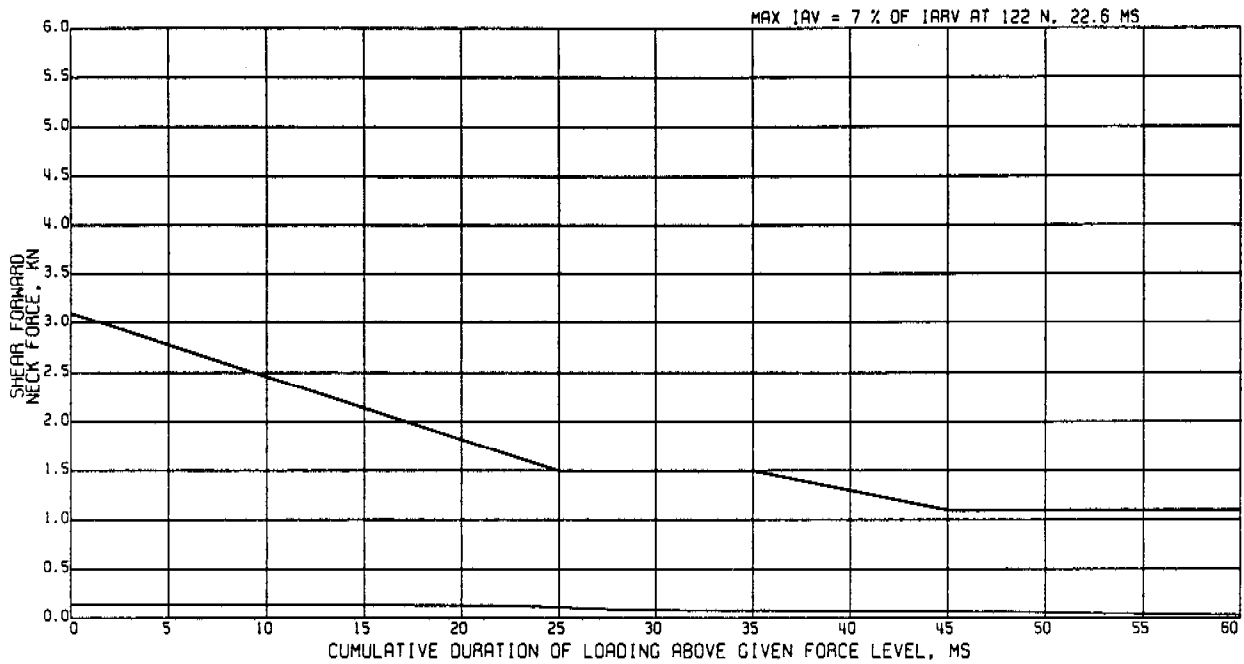
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

FORWARD NECK SHEAR ON HEAD.

R. FRT INJURY REFERENCE

ATD TYPE: GM50H
TEST DATE:12/18/1997



27 PROCESSED 12/18/1997 14:22 V2.07

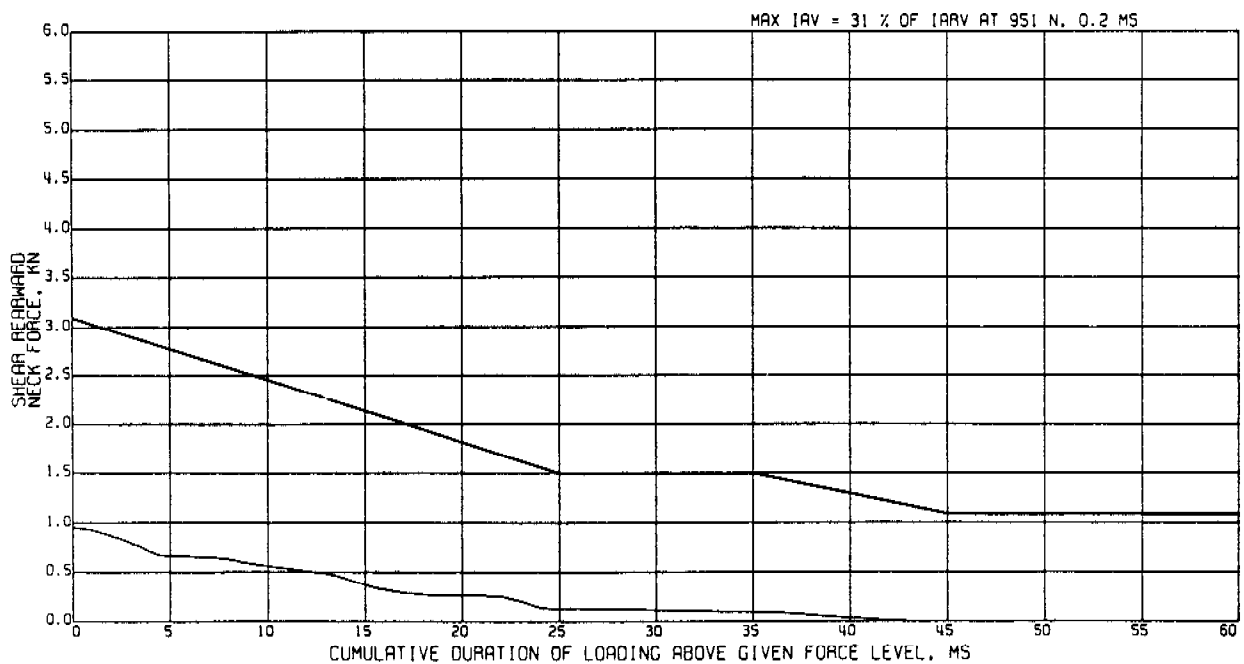
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

REARWARD NECK SHEAR ON HEAD.

R. FRT INJURY REFERENCE

ATD TYPE: GM50H
TEST DATE:12/18/1997



28 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP

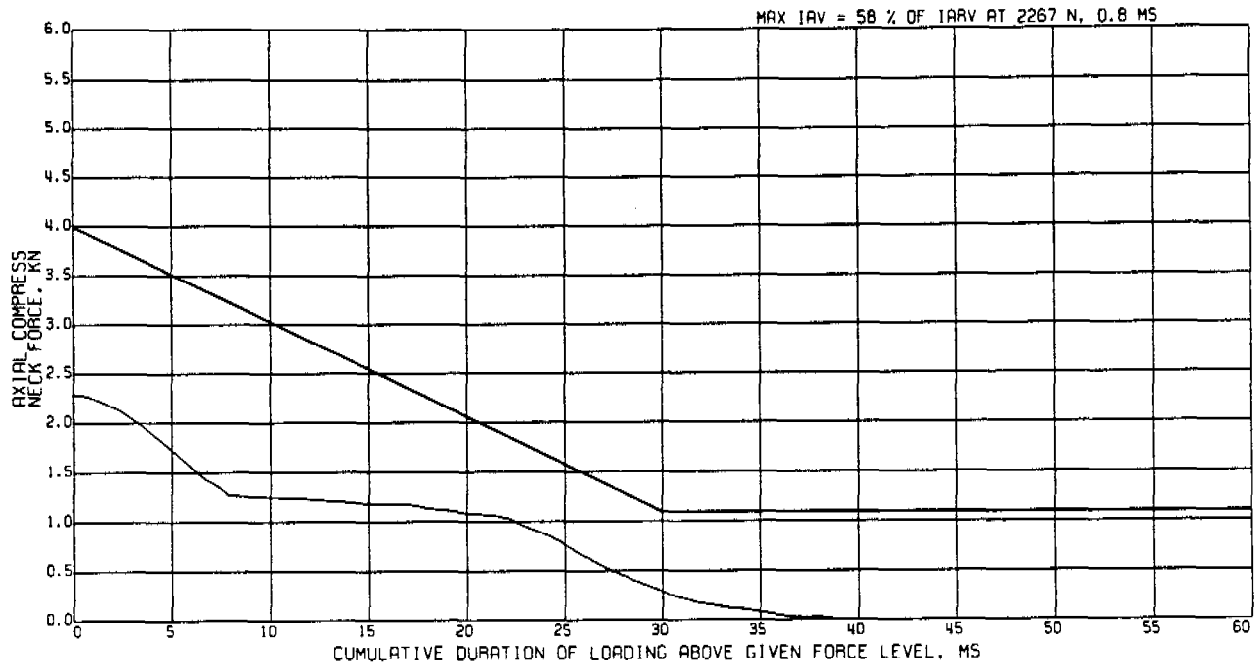
LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

AXIAL COMPRESSION ON HEAD,
R. FRT INJURY REFERENCE

ATD TYPE: GM50H
TEST DATE:12/18/1997



29 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP

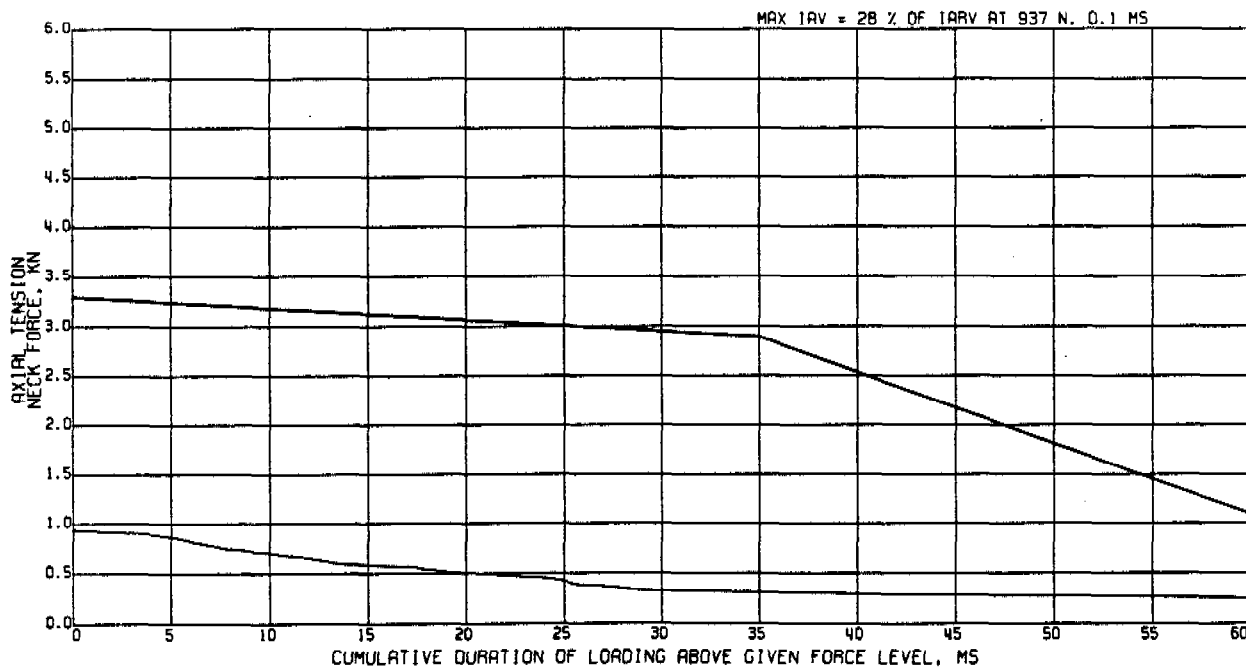
LTV MDB TO STATIONARY VEHICLE

80.9KM/H

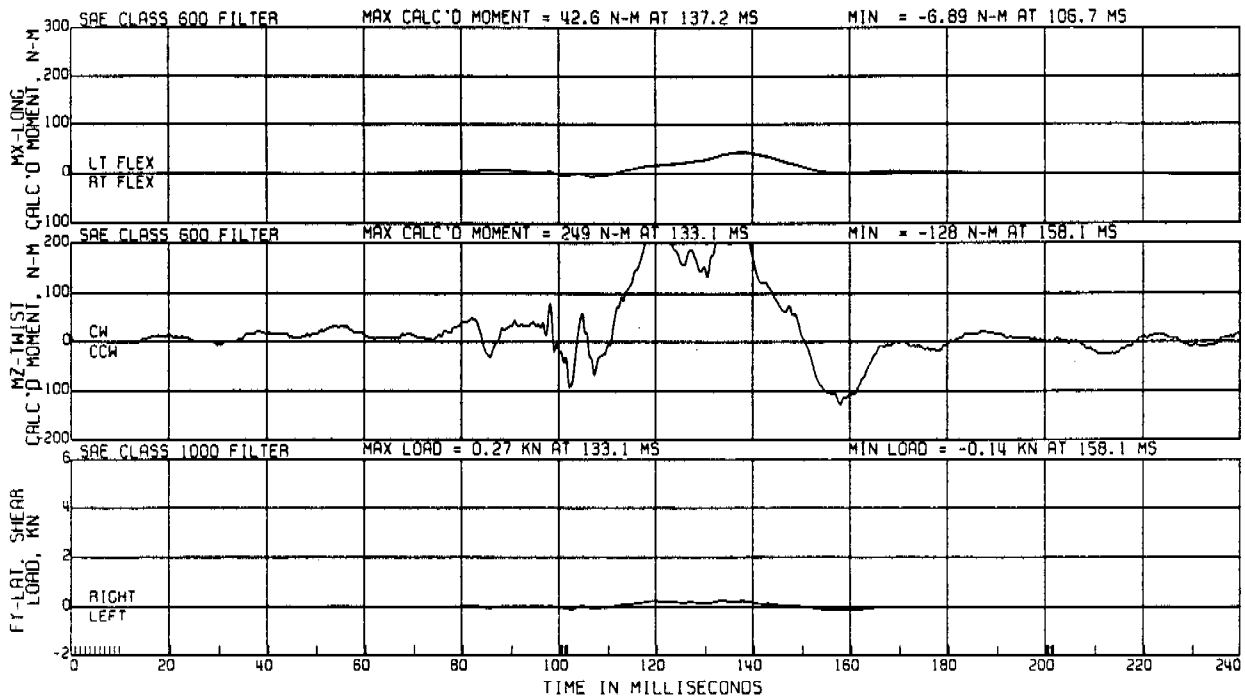
SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

AXIAL TENSION ON HEAD,
R. FRT INJURY REFERENCE

ATD TYPE: GM50H
TEST DATE:12/18/1997

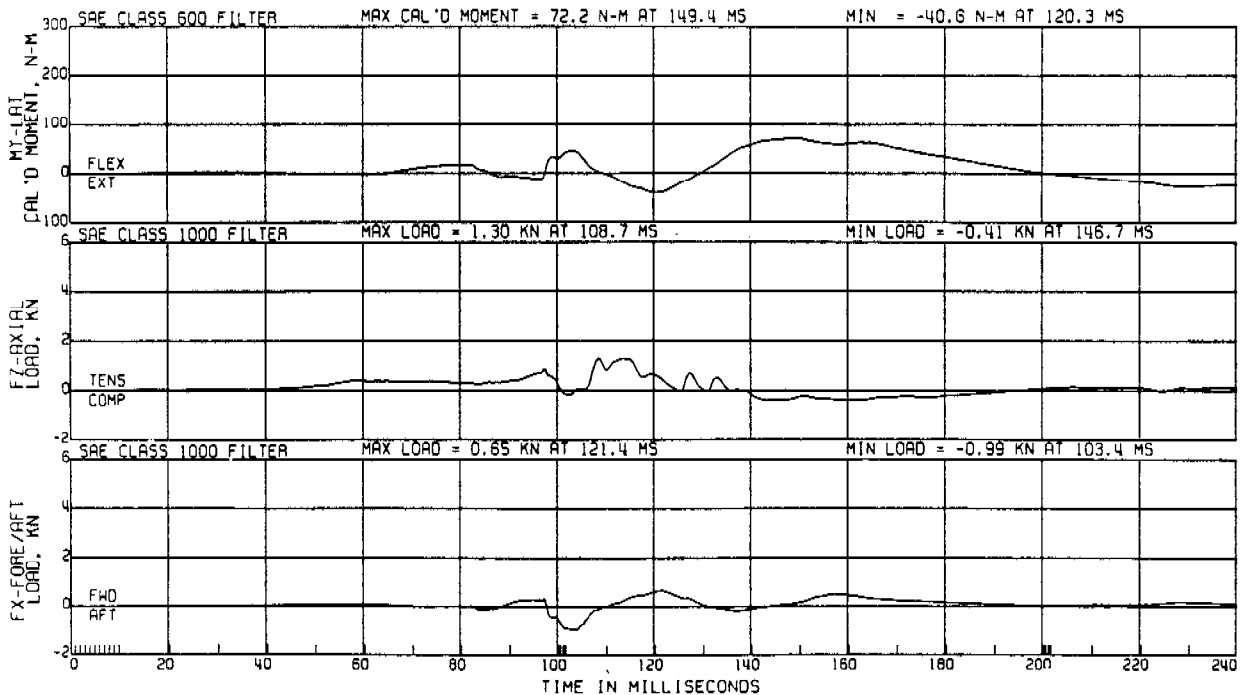


C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000R L. FAT NECK LOADING LOAD ATD TYPE: GMS0H
 ELEC DATA (TORSO ON BASE OF NECK) TEST DATE: 12/18/1997



31 PROCESSED 12/19/1997 07:24 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000R L. FRT NECK LOADING LOAD ATD TYPE: GMS0H
 ELEC DATA (TORSO ON BASE OF NECK) TEST DATE: 12/18/1997



32 PROCESSED 12/19/1997 07:24 V2.07

C11818 L.REAR IMP 70% OVERLAP

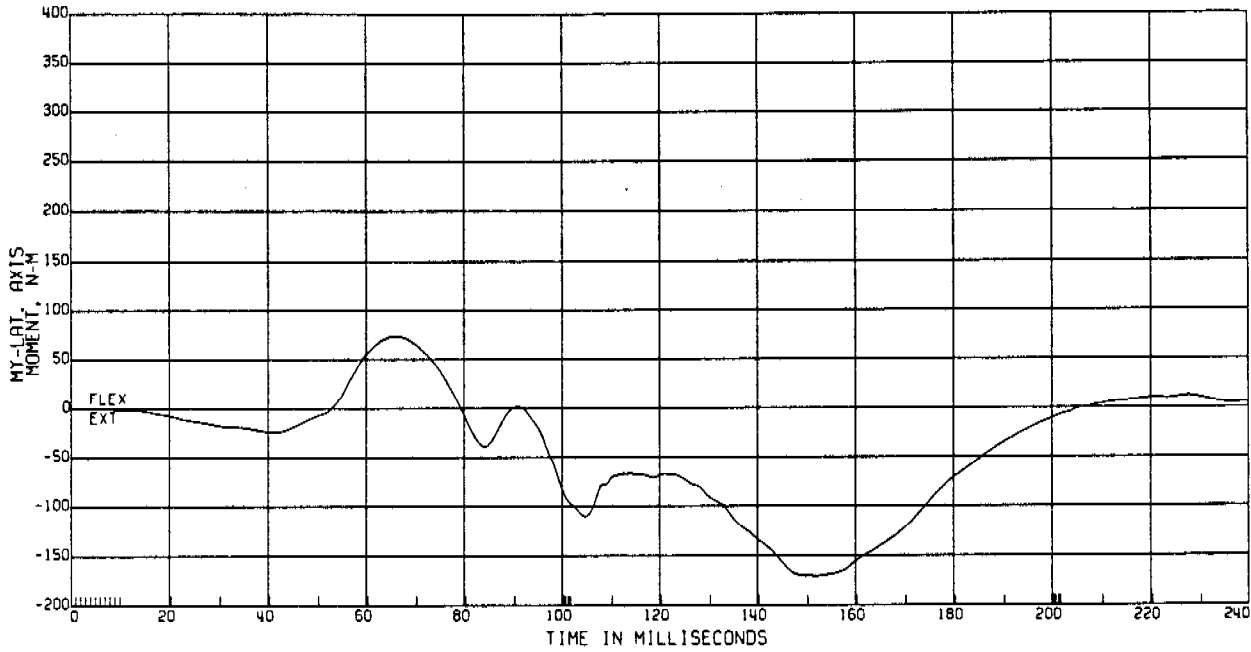
LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

L. FRT LOWER LUMBAR MOMENT

ATD TYPE: GM50H
TEST DATE:12/18/1997



33 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP

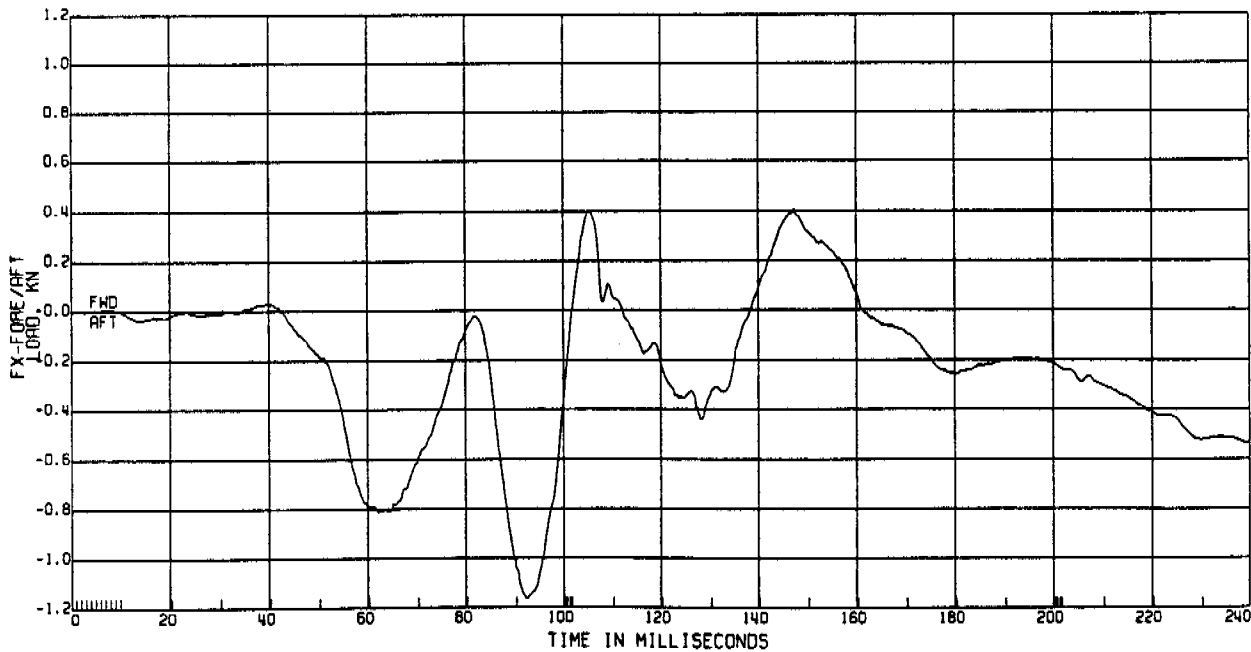
LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 1000

L. FRT LOWER LUMBAR LOAD

ATD TYPE: GM50H
TEST DATE:12/18/1997



C11818 L.REAR IMP 70% OVERLAP

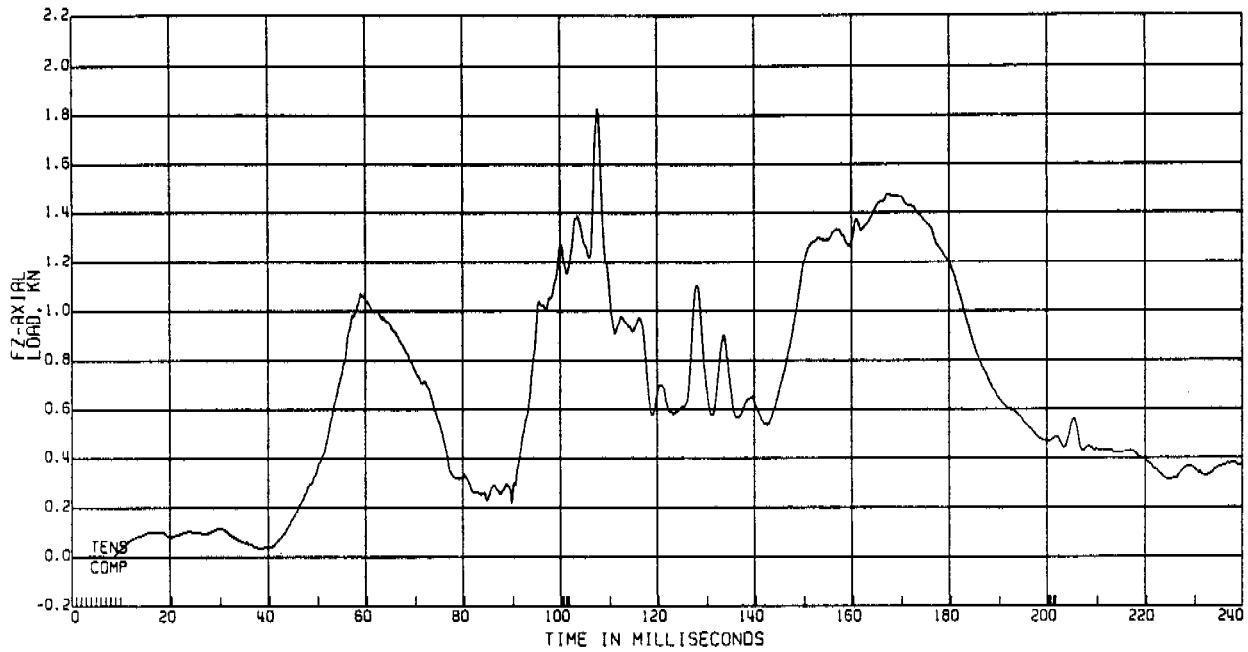
LTV MOB TO STATIONARY VEHICLE

80.9KM/H

SC 8W91820 4-000R
ELEC DATA, SAE CLASS 1000

L. FRT LOWER LUMBAR LOAD

ATO TYPE: GM50H
TEST DATE:12/18/1997



35 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP

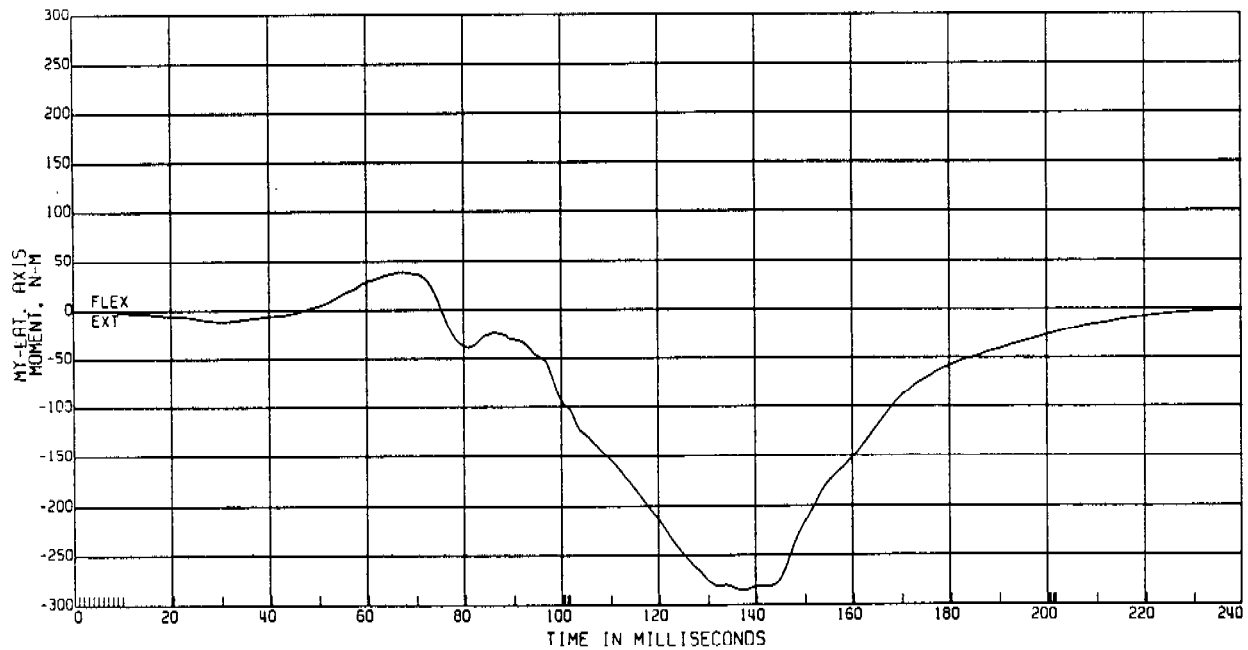
LTV MOB TO STATIONARY VEHICLE

80.9KM/H

SC 8W91820 4-000R
ELEC DATA, SAE CLASS 1000

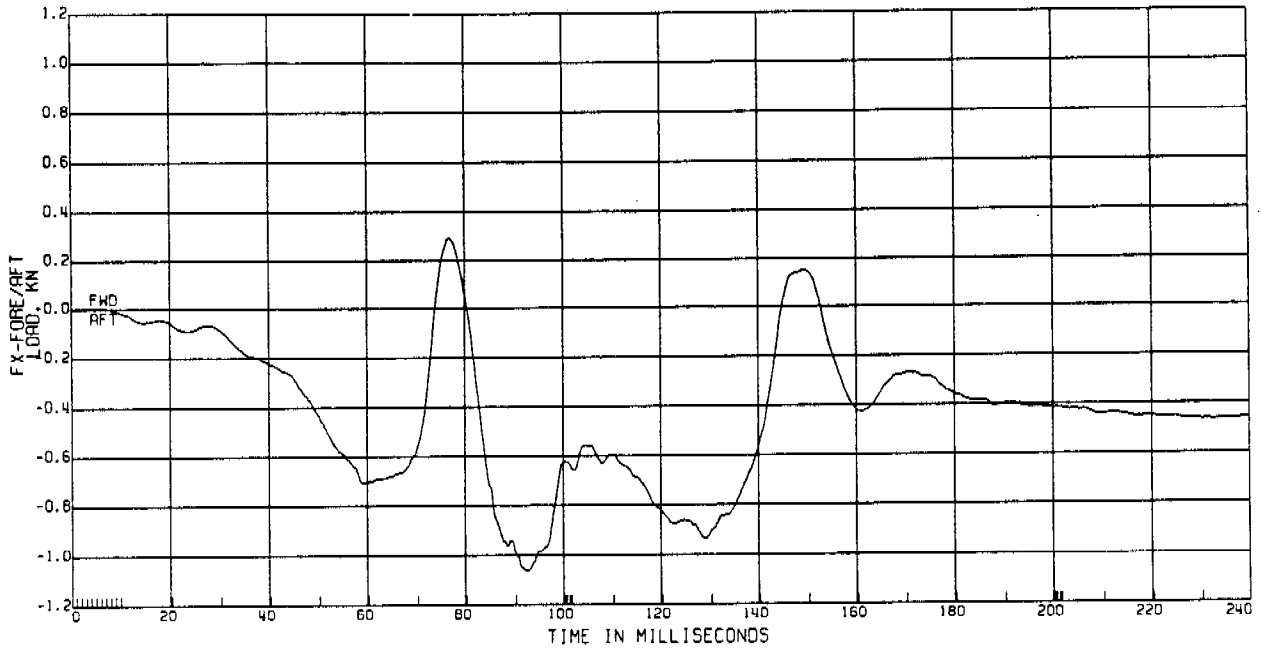
R. FRT LOWER LUMBAR MOMENT

ATO TYPE: GM50H
TEST DATE:12/18/1997



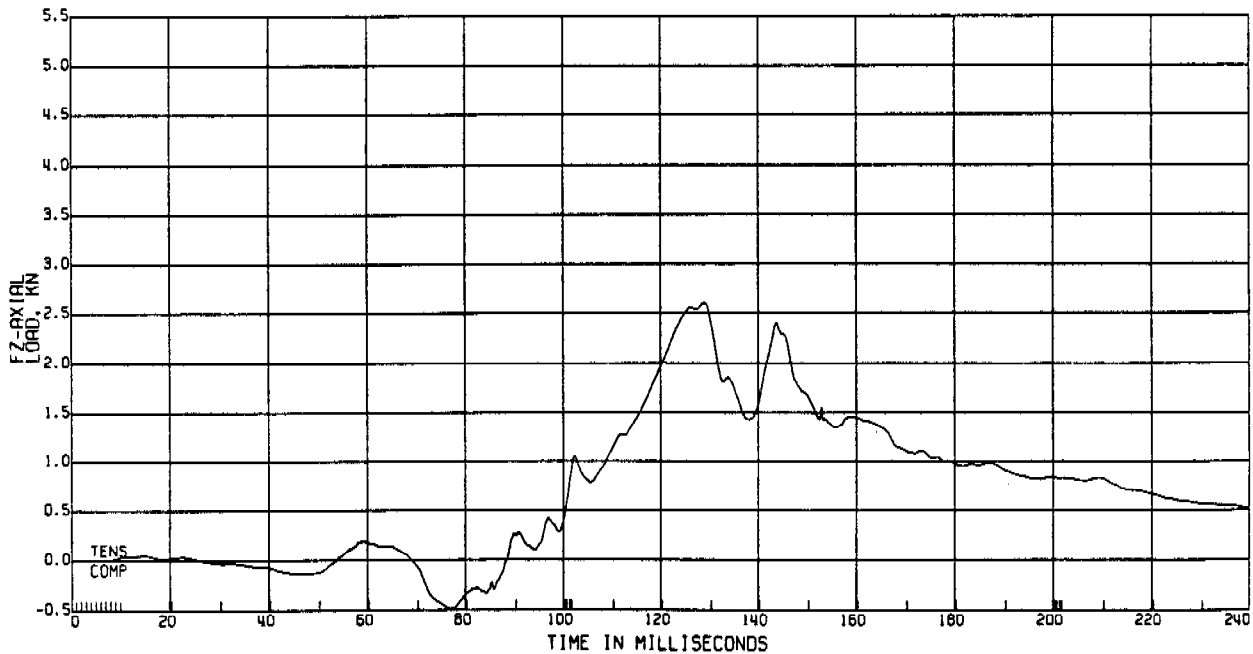
36 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR R. FRT LOWER LUMBAR LOAD ATD TYPE: GM50H
 ELEC DATA, SAE CLASS 1000 TEST DATE: 12/18/1997

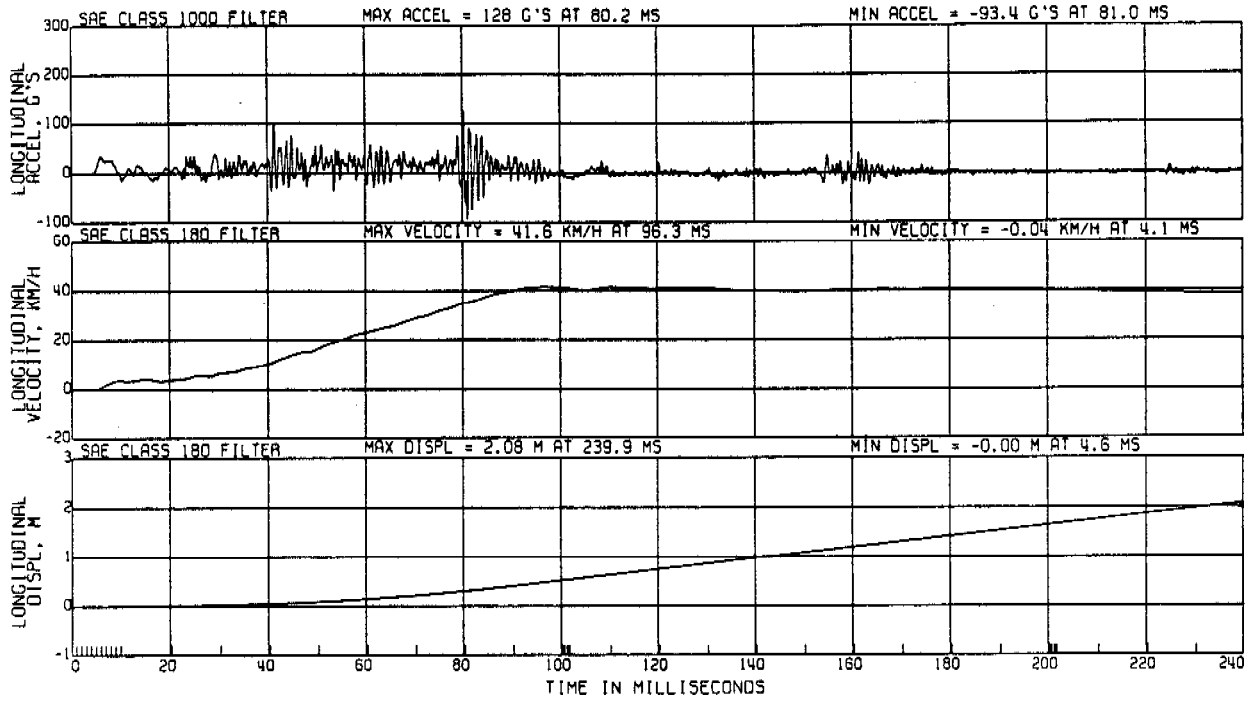


37 PROCESSED 12/18/1997 14:22 V2.07

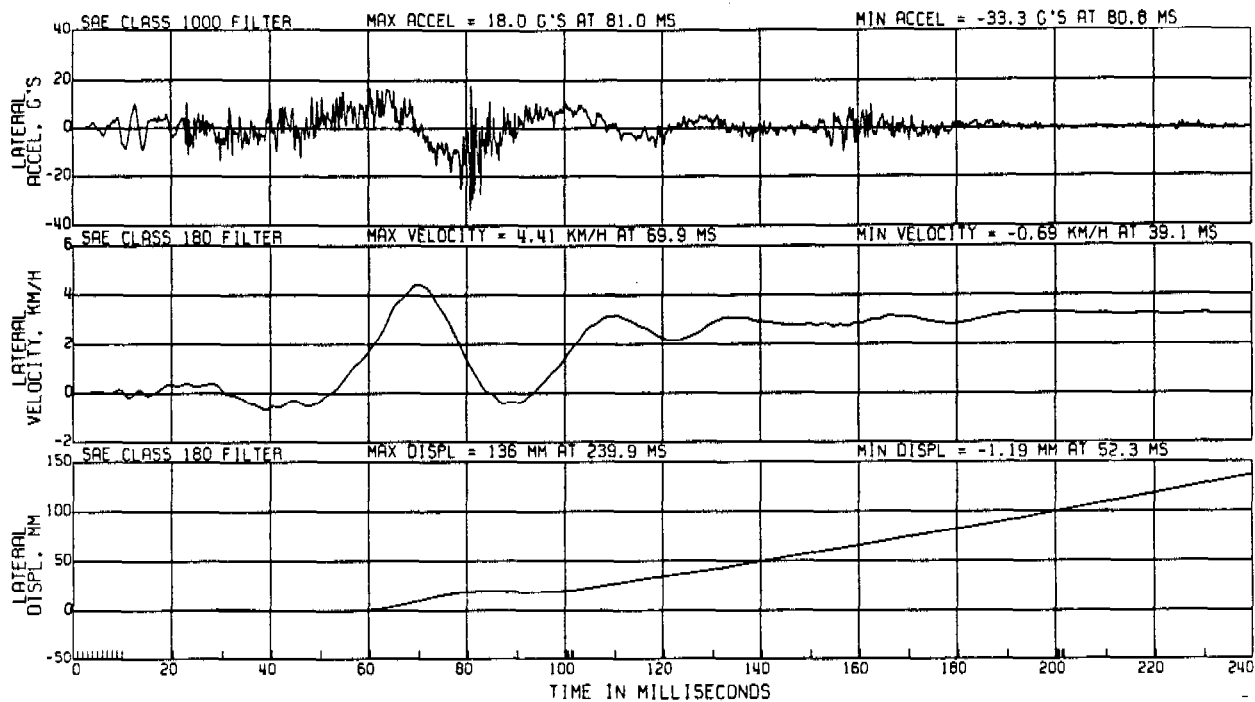
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR R. FRT LOWER LUMBAR LOAD ATD TYPE: GM50H
 ELEC DATA, SAE CLASS 1000 TEST DATE: 12/18/1997



38 PROCESSED 12/18/1997 14:22 V2.07

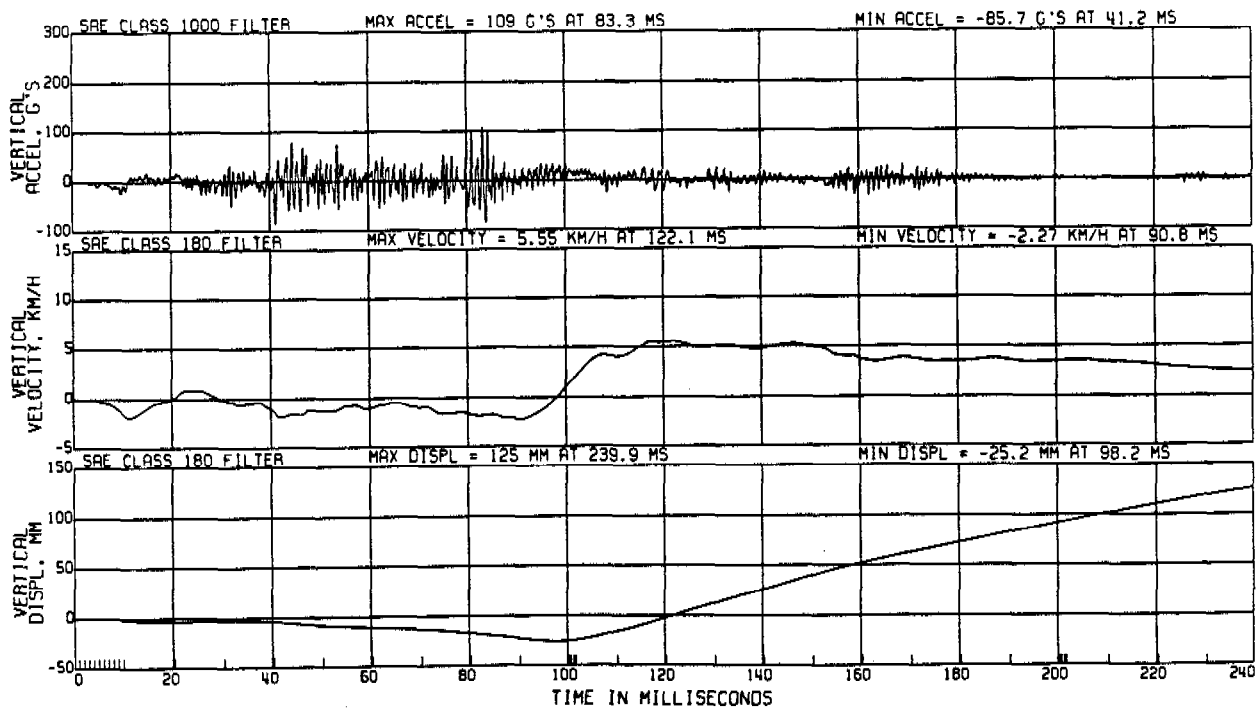


C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR CTR FRT RAD TIE BAR TEST DATE:12/18/1997
 ELEC DATA



40 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR CTR FRT RAD TIE BAR TEST DATE:12/18/1997
 ELEC DATA



41 PROCESSED 12/18/1997 14:22 V2.07

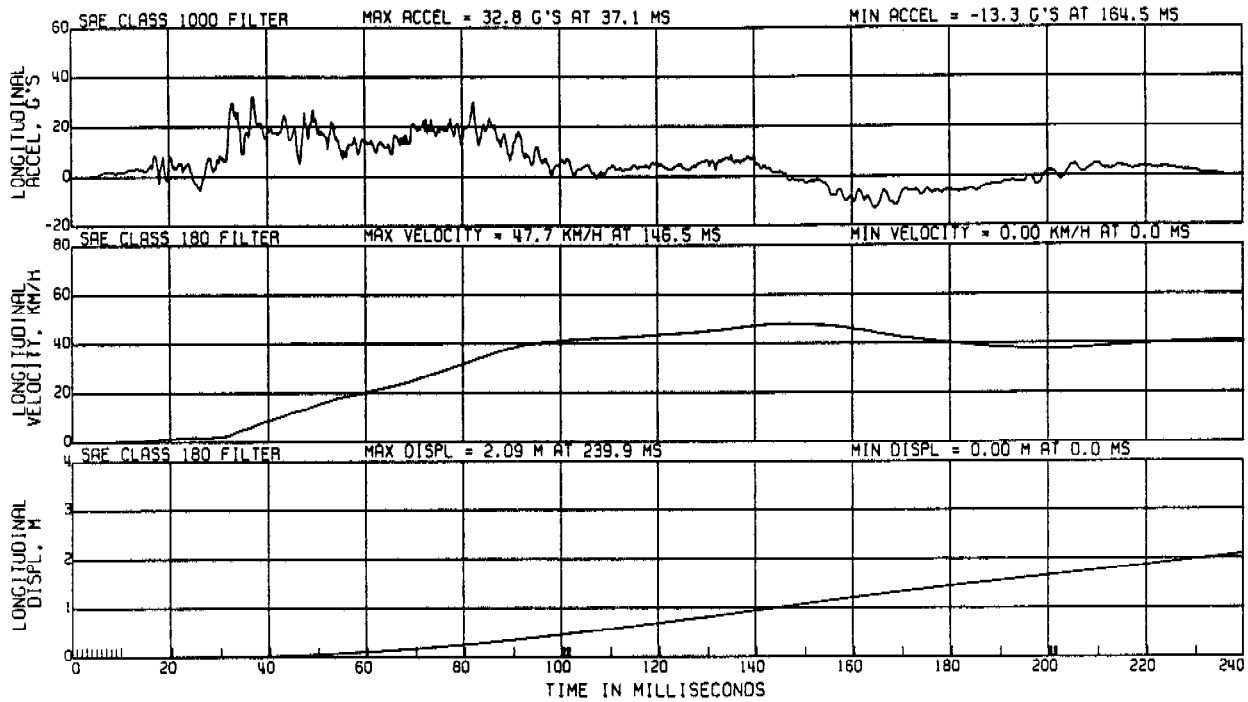
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W9182D 4-000R

UPPER ENGINE

TEST DATE:12/18/1997



42 PROCESSED 12/18/1997 14:22 V2.07

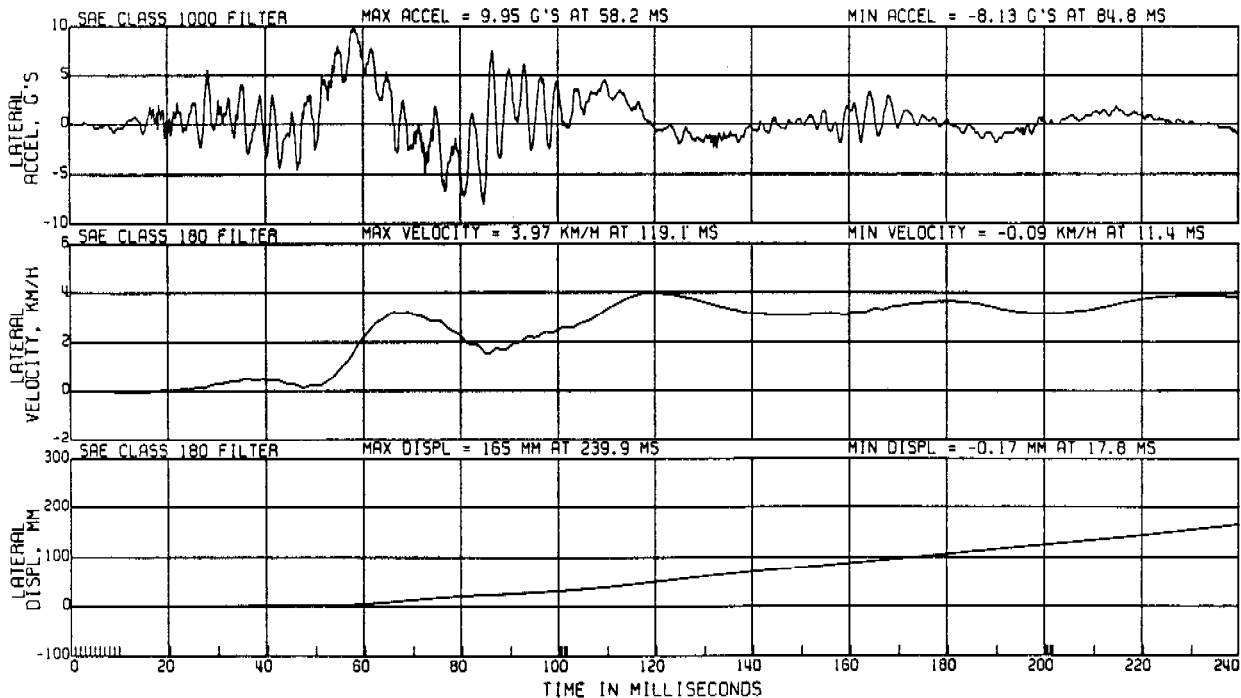
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W9182D 4-000R

UPPER ENGINE

TEST DATE:12/18/1997



43 PROCESSED 12/18/1997 14:22 V2.07

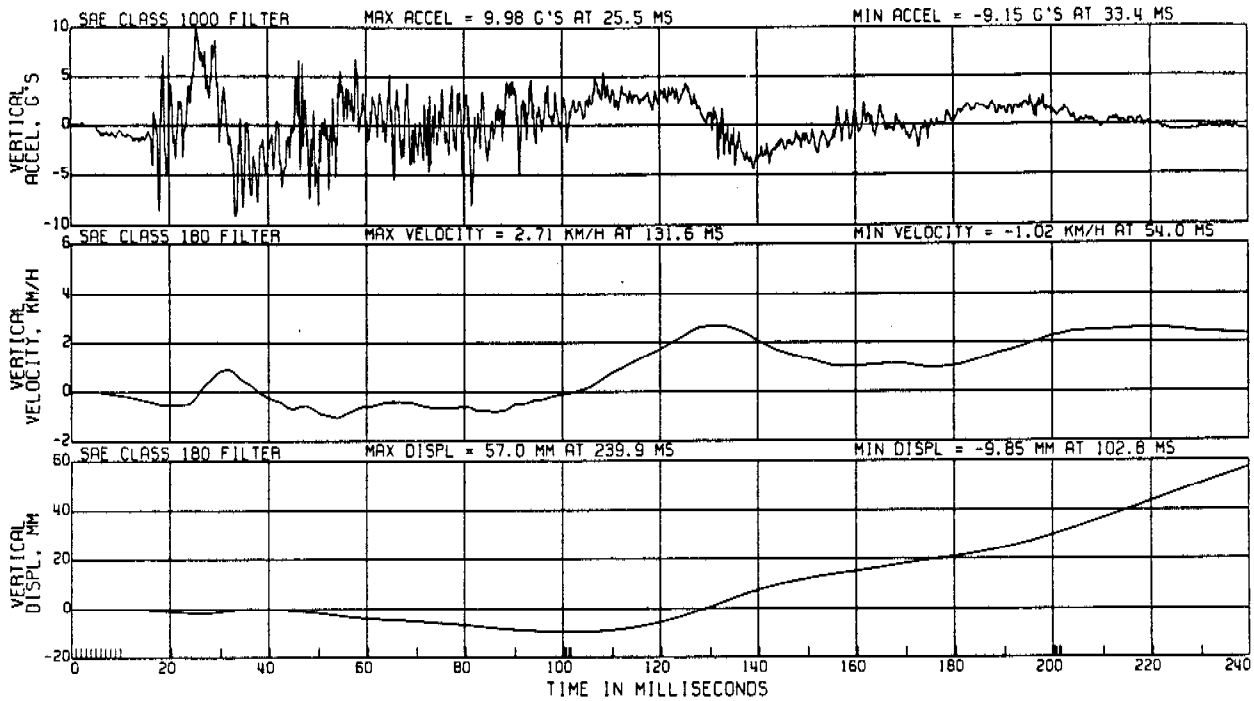
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

UPPER ENGINE

TEST DATE:12/18/1997



44 PROCESSED 12/18/1997 14:22 V2.07

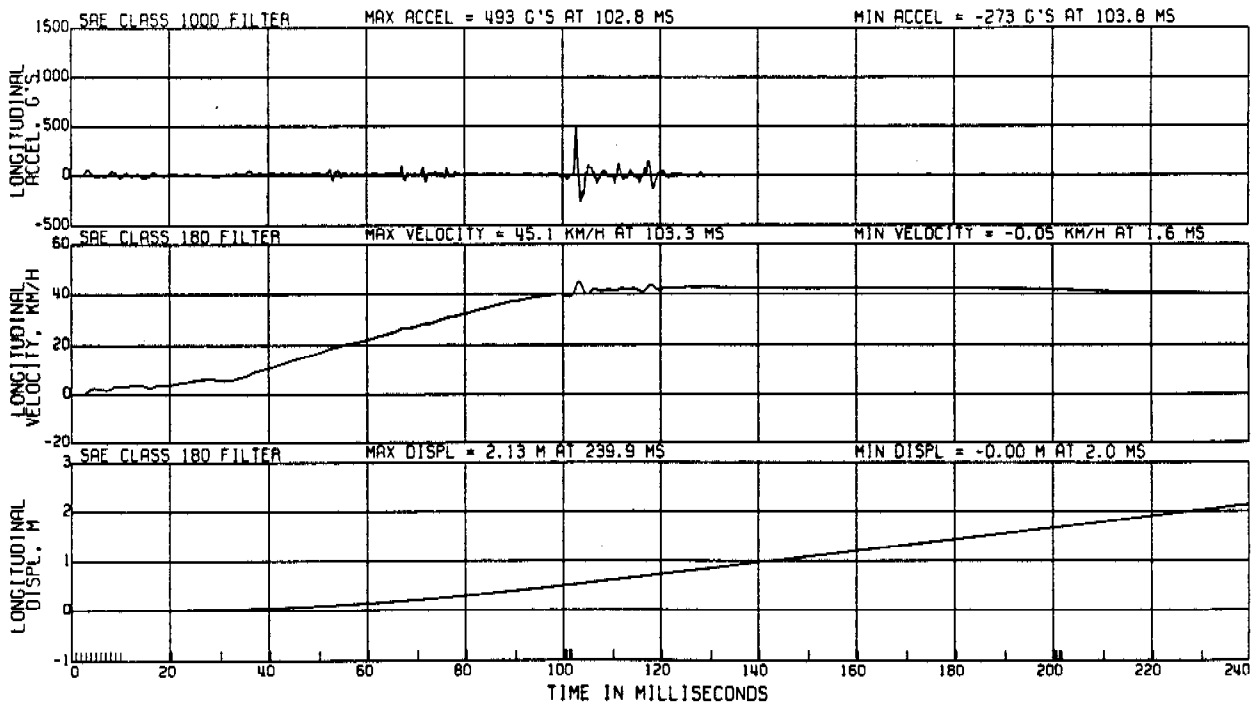
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

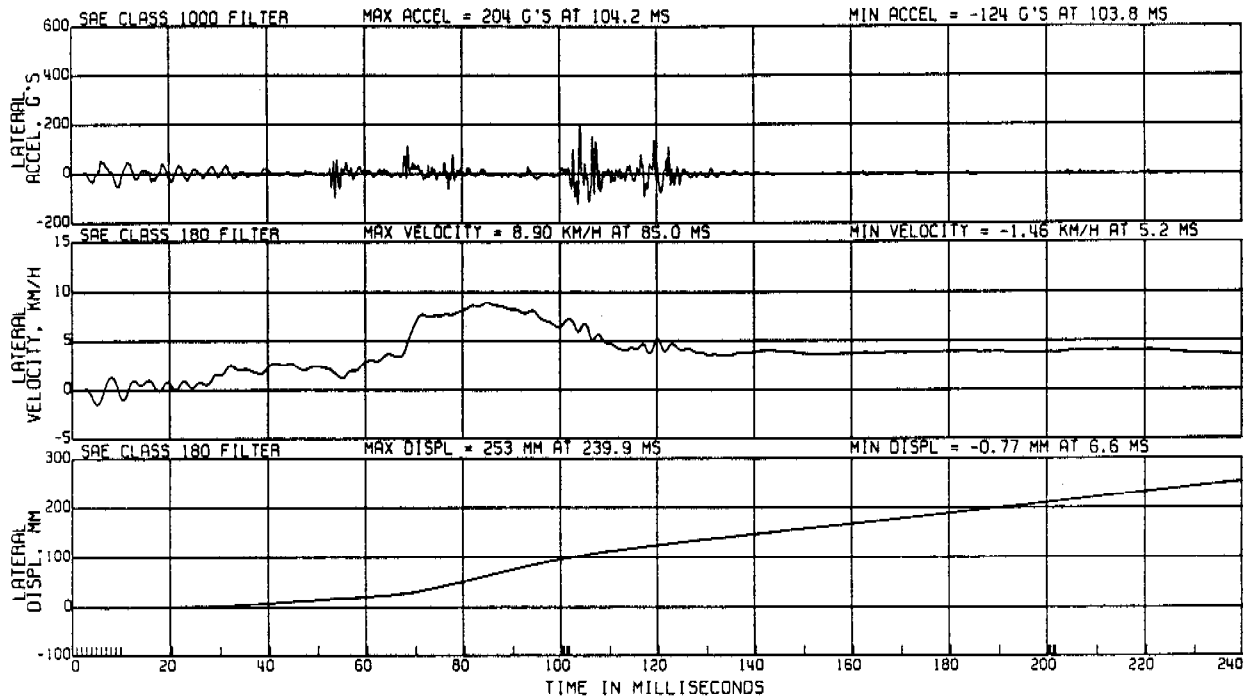
L. FRT SEAT O/B MOUNTING RAIL

TEST DATE:12/18/1997



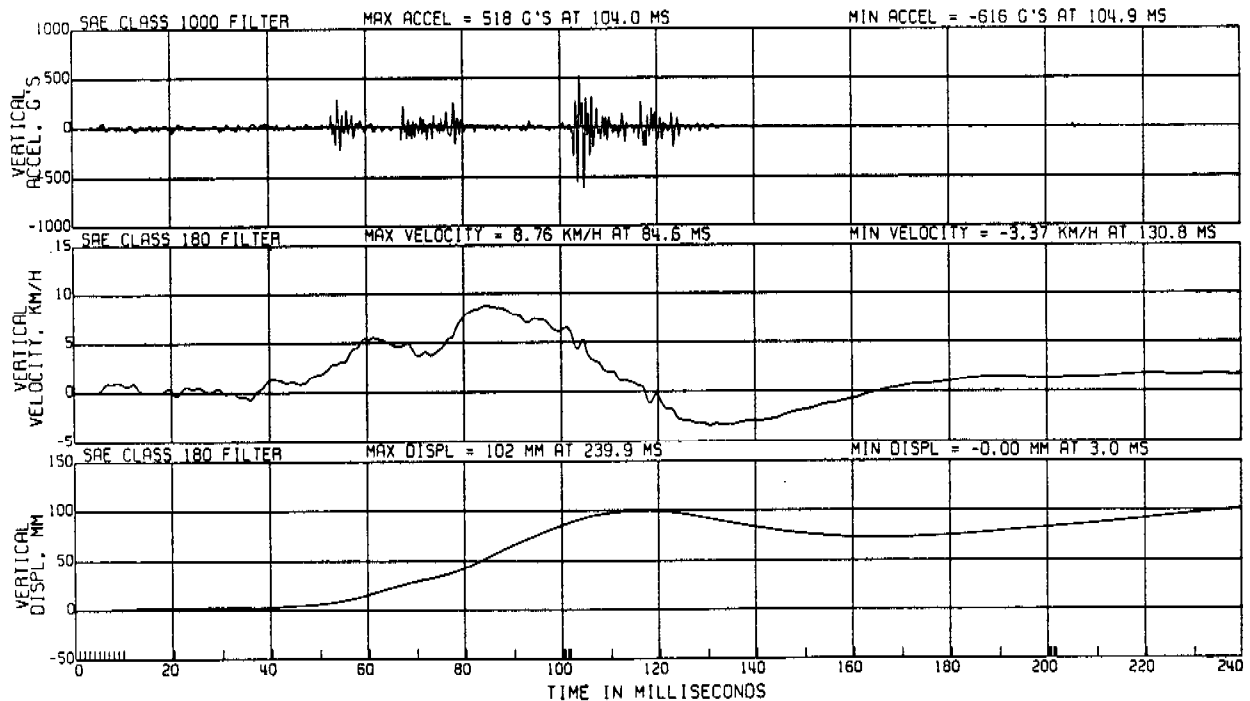
45 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000R L. FAT SEAT O/B MOUNTING RAIL TEST DATE:12/18/1997
 ELEC DATA



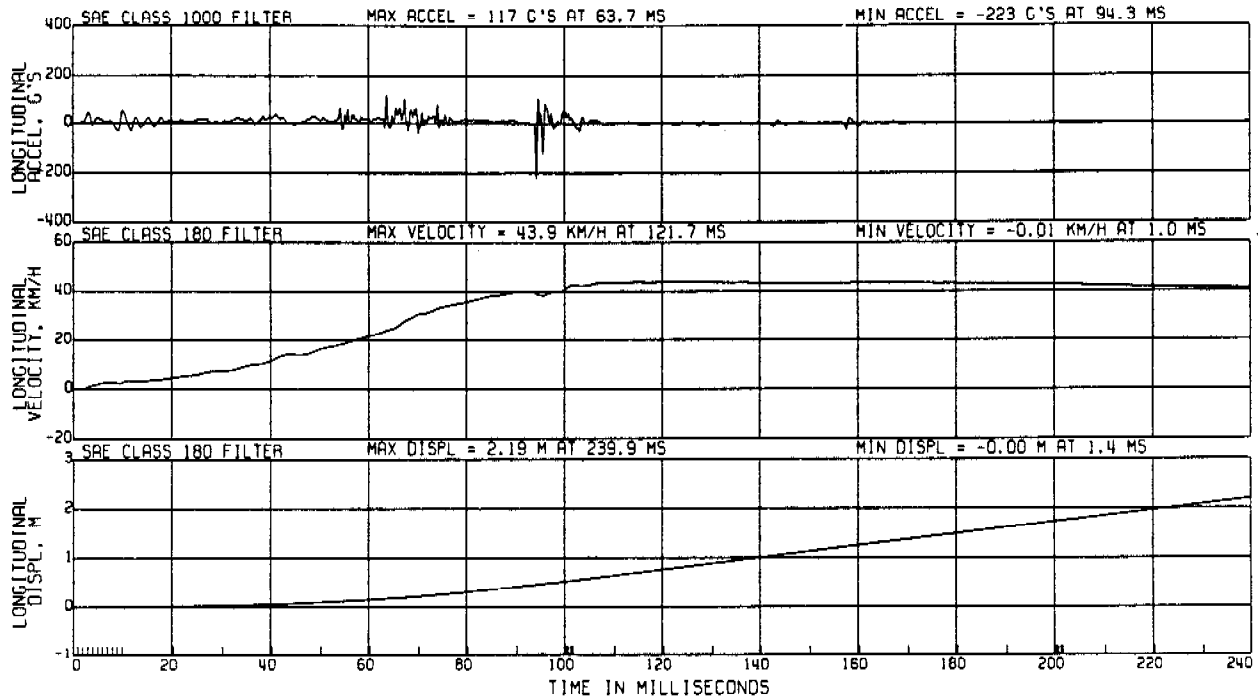
46 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000R L. FAT SEAT O/B MOUNTING RAIL TEST DATE:12/18/1997
 ELEC DATA



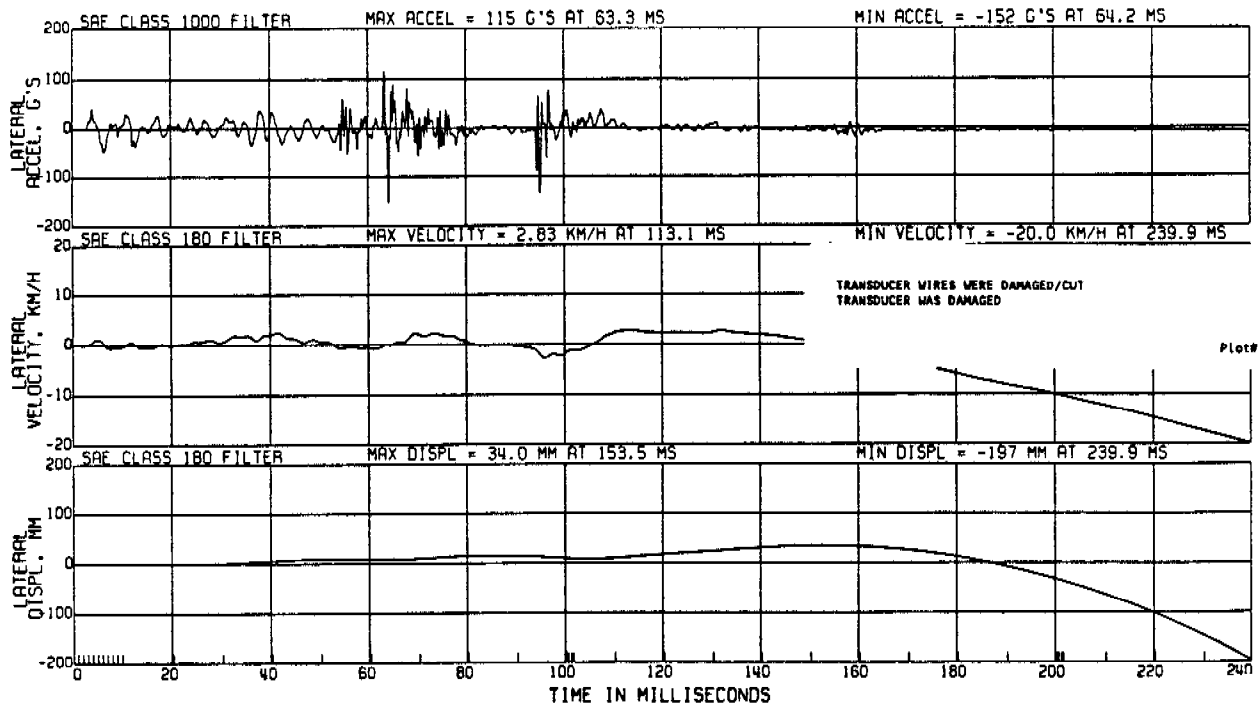
47 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000R R. FRT SEAT O/B MOUNTING RAIL TEST DATE:12/18/1997
 ELEC DATA



48 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-000R R. FRT SEAT O/B MOUNTING RAIL TEST DATE:12/18/1997
 ELEC DATA



49 PROCESSED 12/18/1997 14:22 V2.07

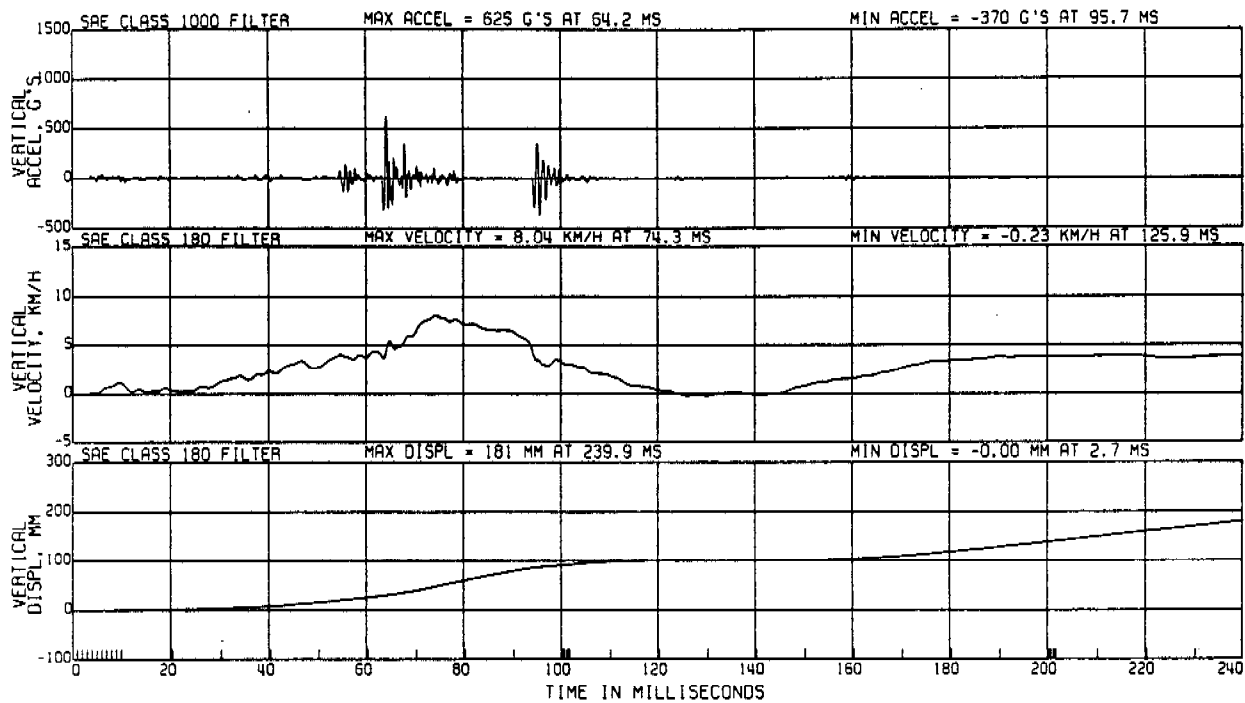
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W91820 4-000A

R. FAT SEAT O/B MOUNTING RAIL

TEST DATE:12/18/1997



50 PROCESSED 12/18/1997 14:22 V2.07

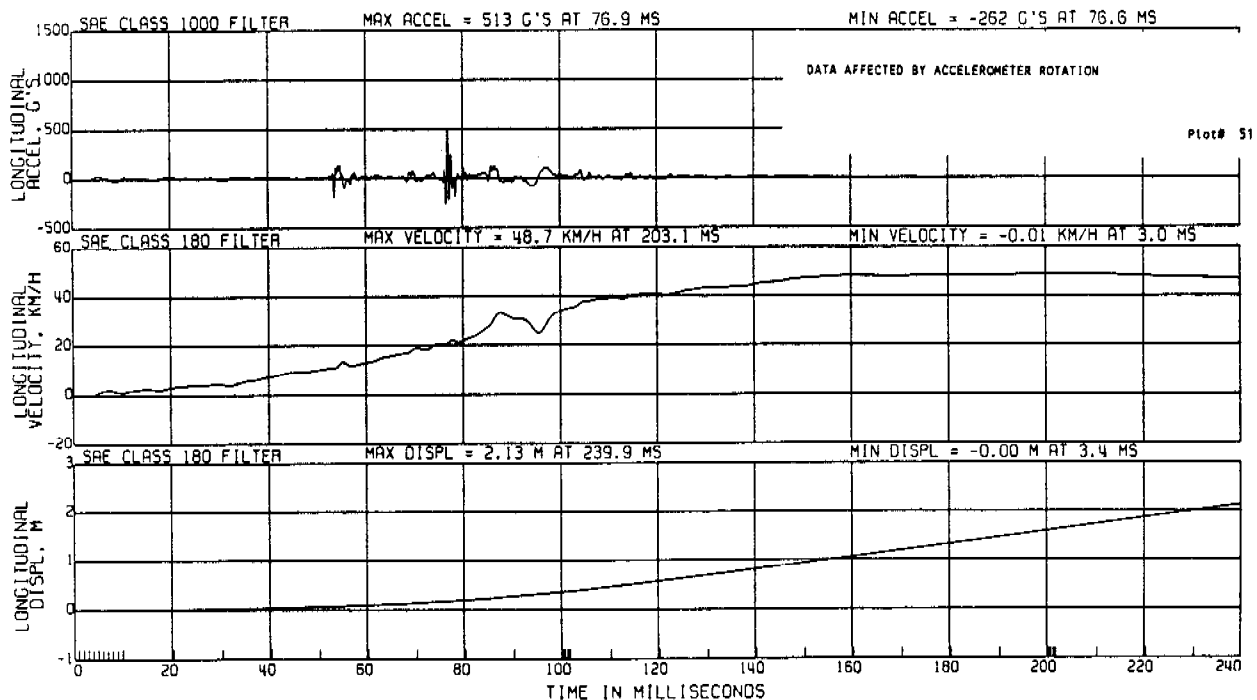
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W91820 4-000A

L. FAT SEAT BACK

TEST DATE:12/18/1997



51 PROCESSED 12/18/1997 14:22 V2.07

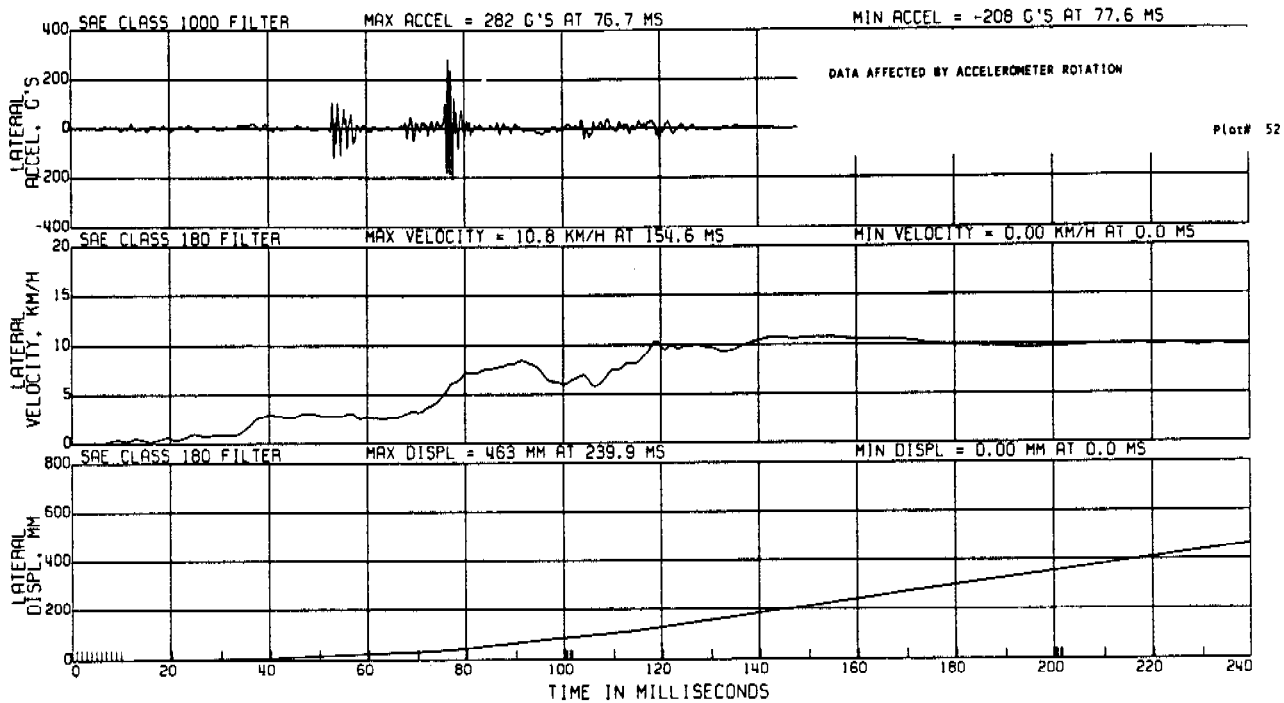
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

L. FRT SEAT BACK

TEST DATE:12/18/1997



52 PROCESSED 12/18/1997 14:22 V2.07

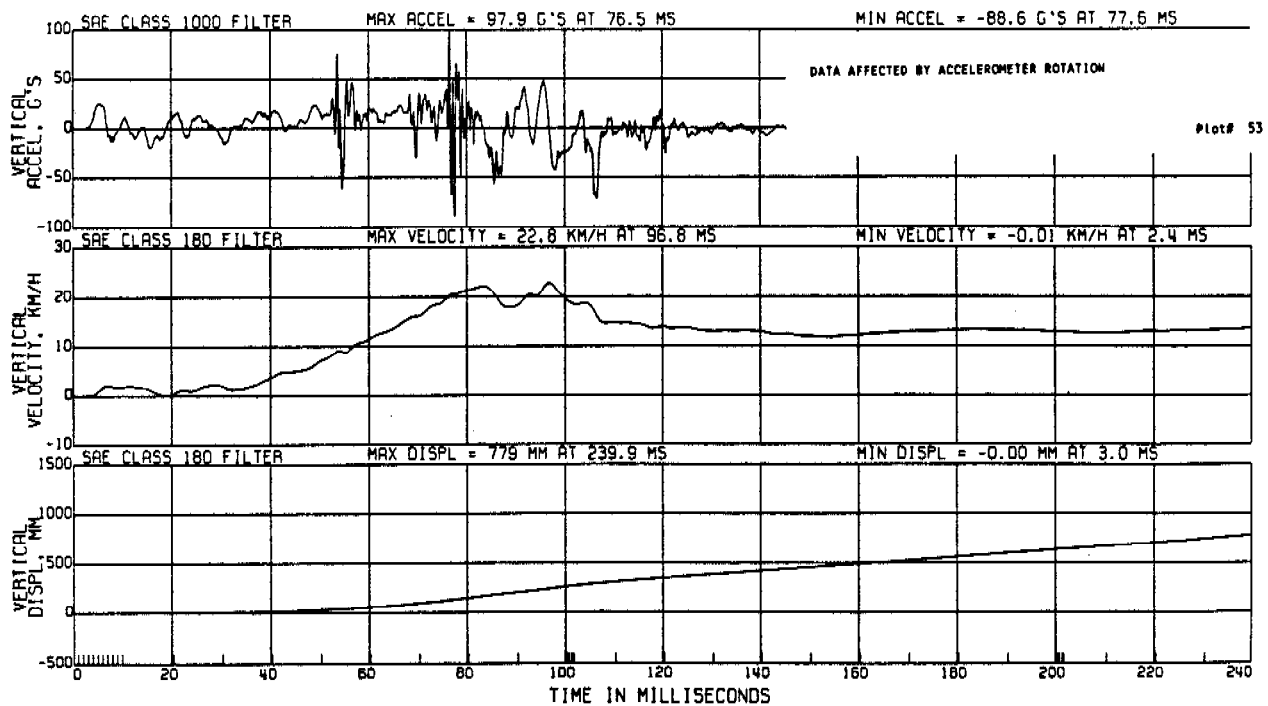
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

L. FRT SEAT BACK

TEST DATE:12/18/1997



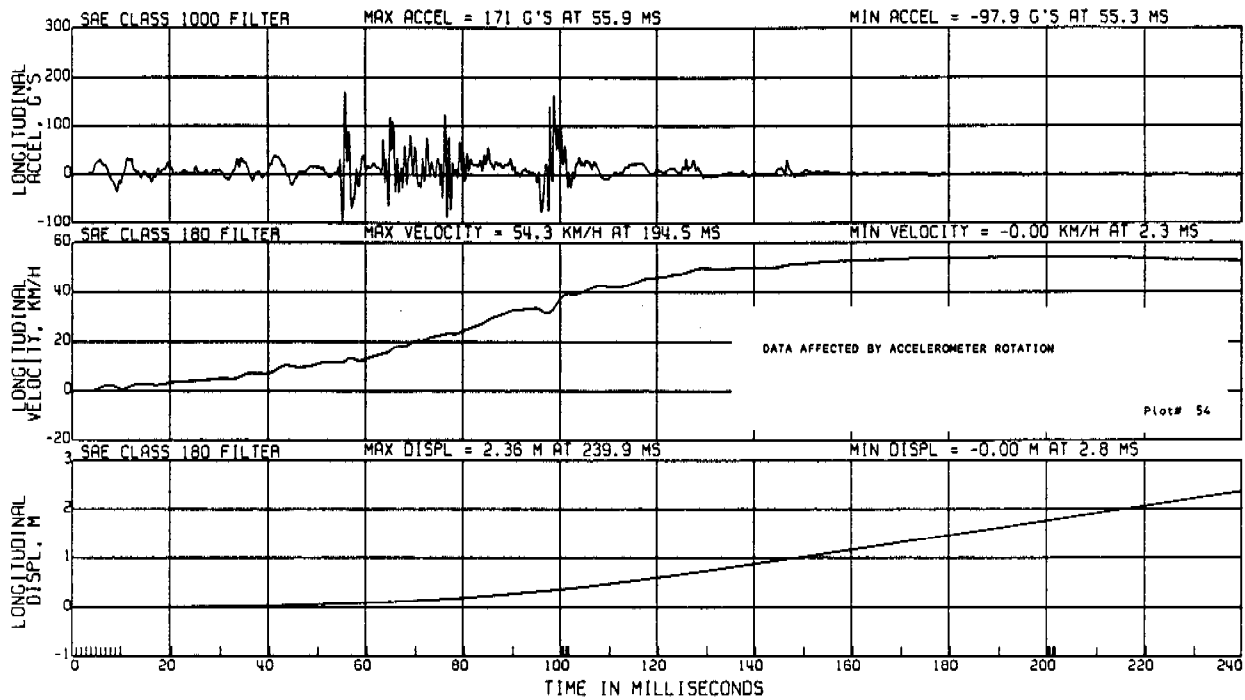
53 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W91820 4-000A
ELEC DATA

R. FRT SEAT BACK

TEST DATE:12/18/1997



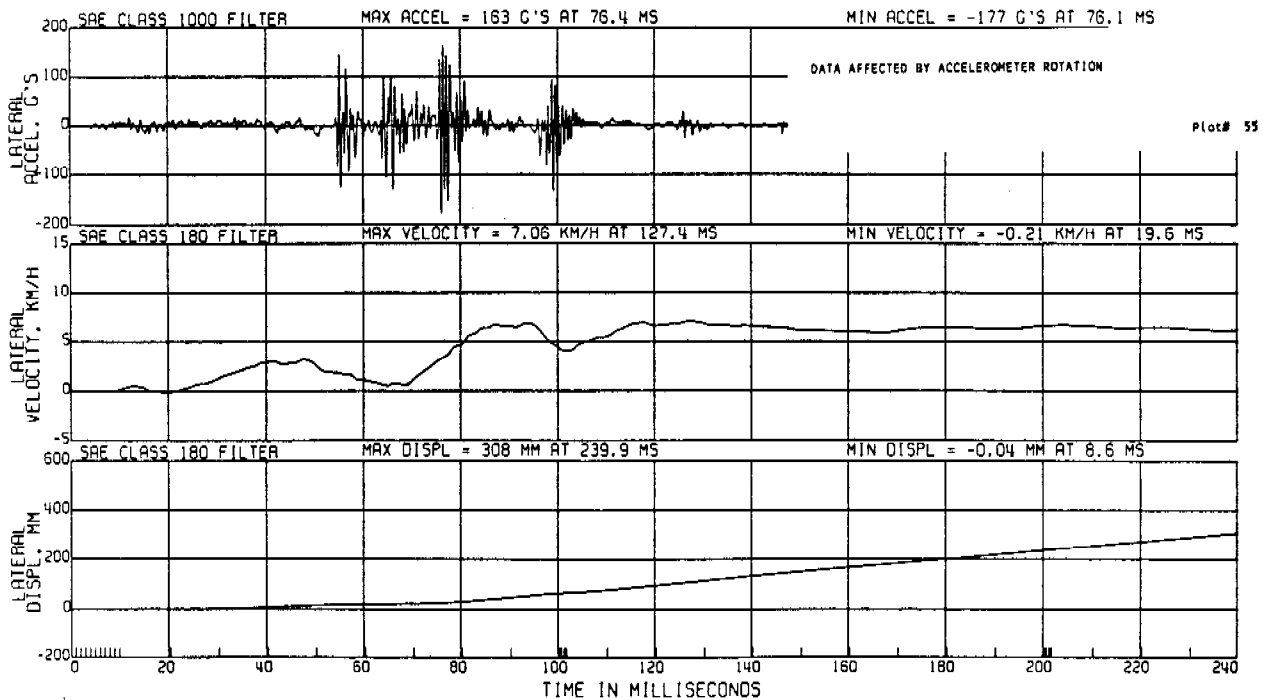
54 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W91820 4-000A
ELEC DATA

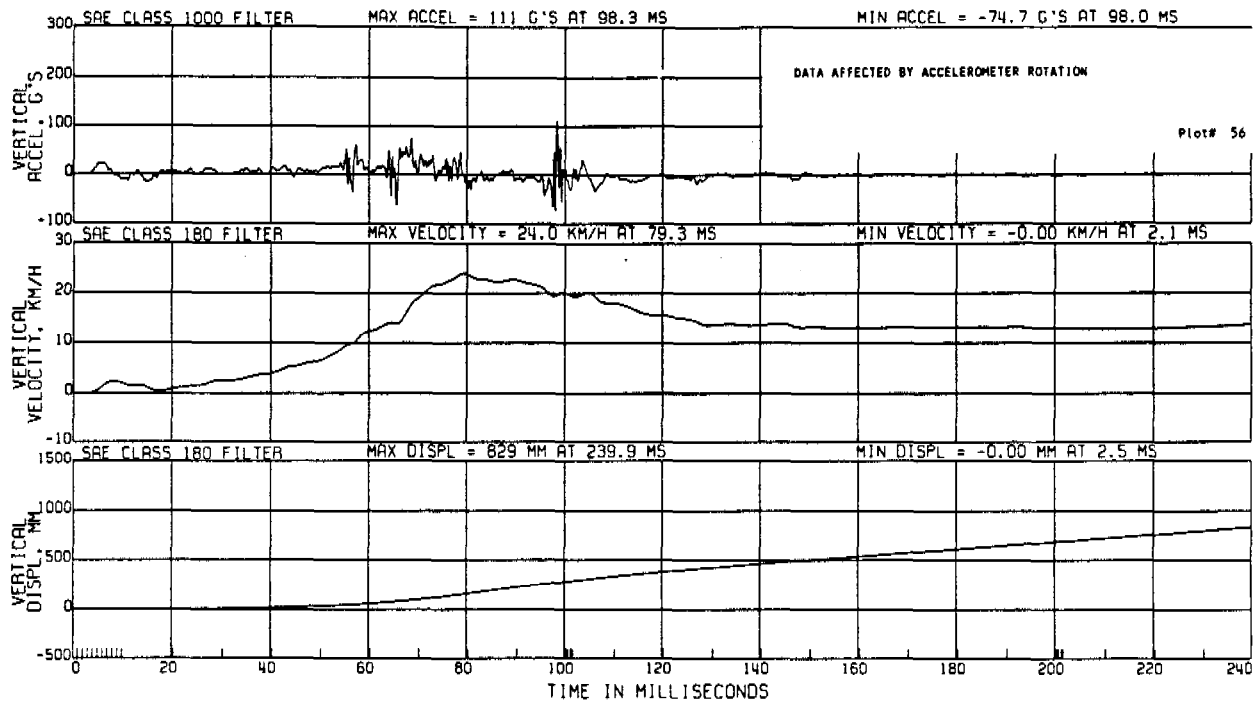
R. FRT SEAT BACK

TEST DATE:12/18/1997



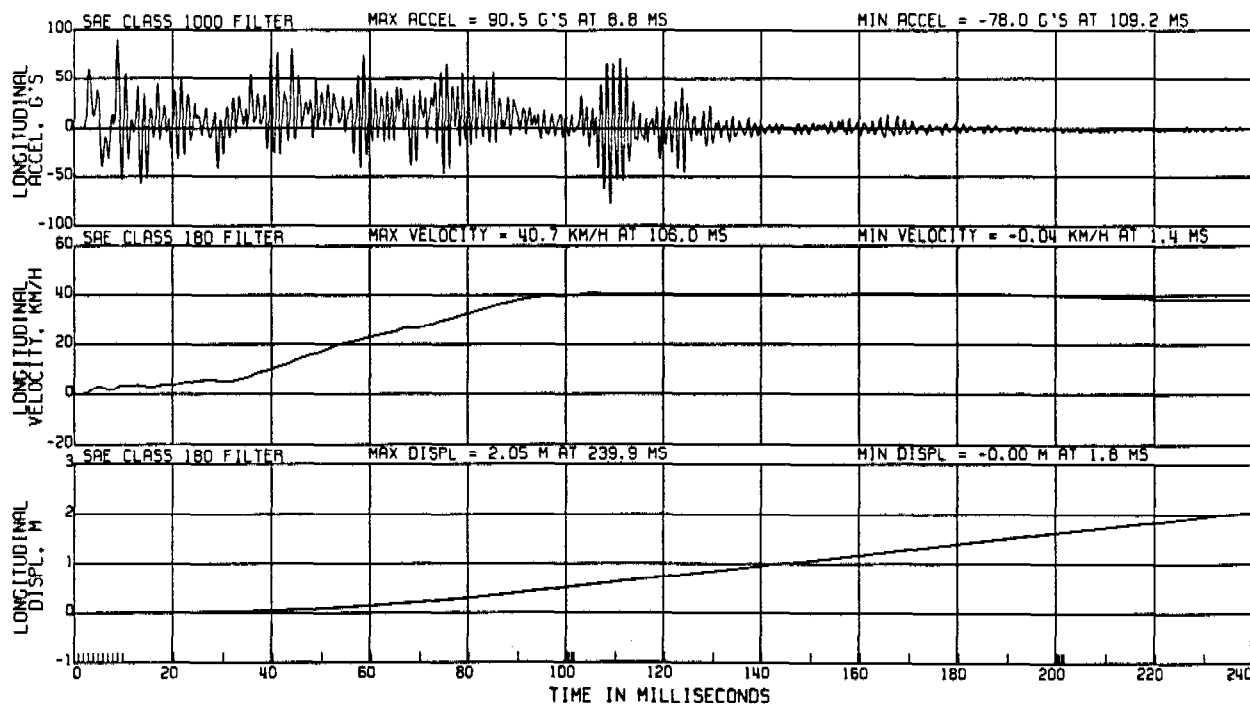
55 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR R. FRT SEAT BACK TEST DATE:12/18/1997
 ELEC DATA



56 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H
 SC 8W9182D 4-DOOR L. FRT ROCKER TEST DATE:12/18/1997
 ELEC DATA



57 PROCESSED 12/18/1997 14:22 V2.07

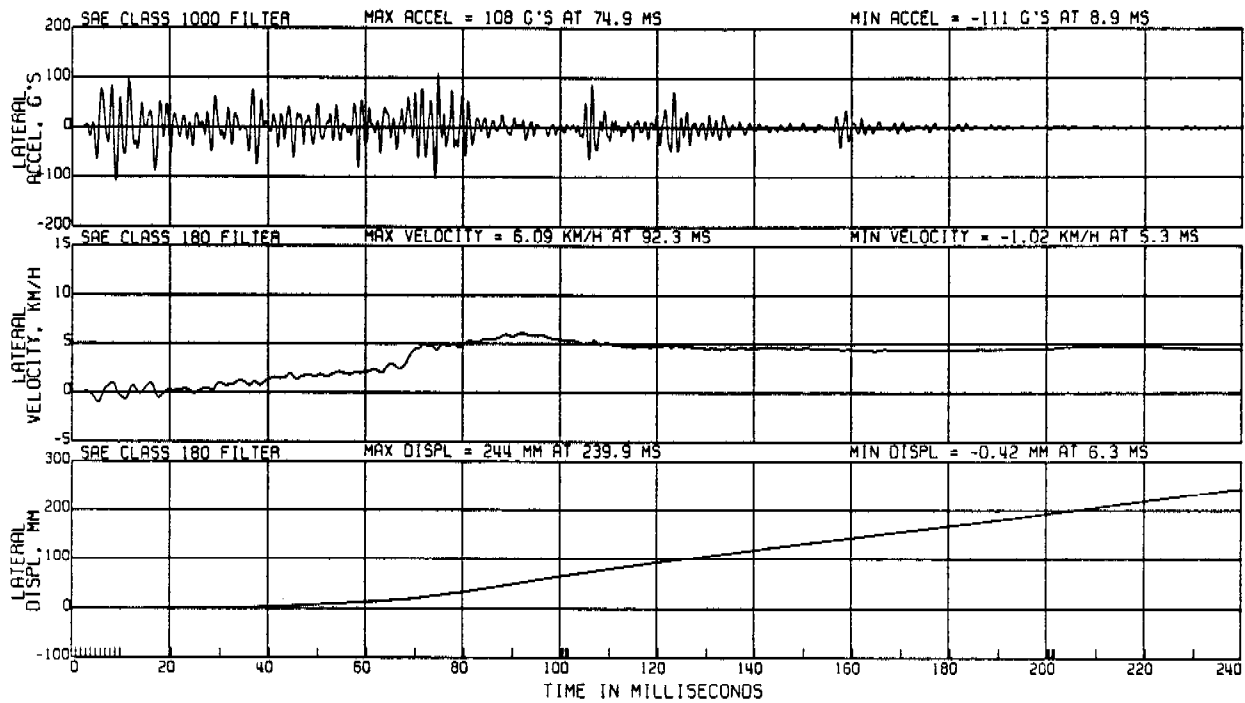
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W9182D 4-000R

L. FRT ROCKER

TEST DATE:12/18/1997



58 PROCESSED 12/18/1997 14:22 V2.07

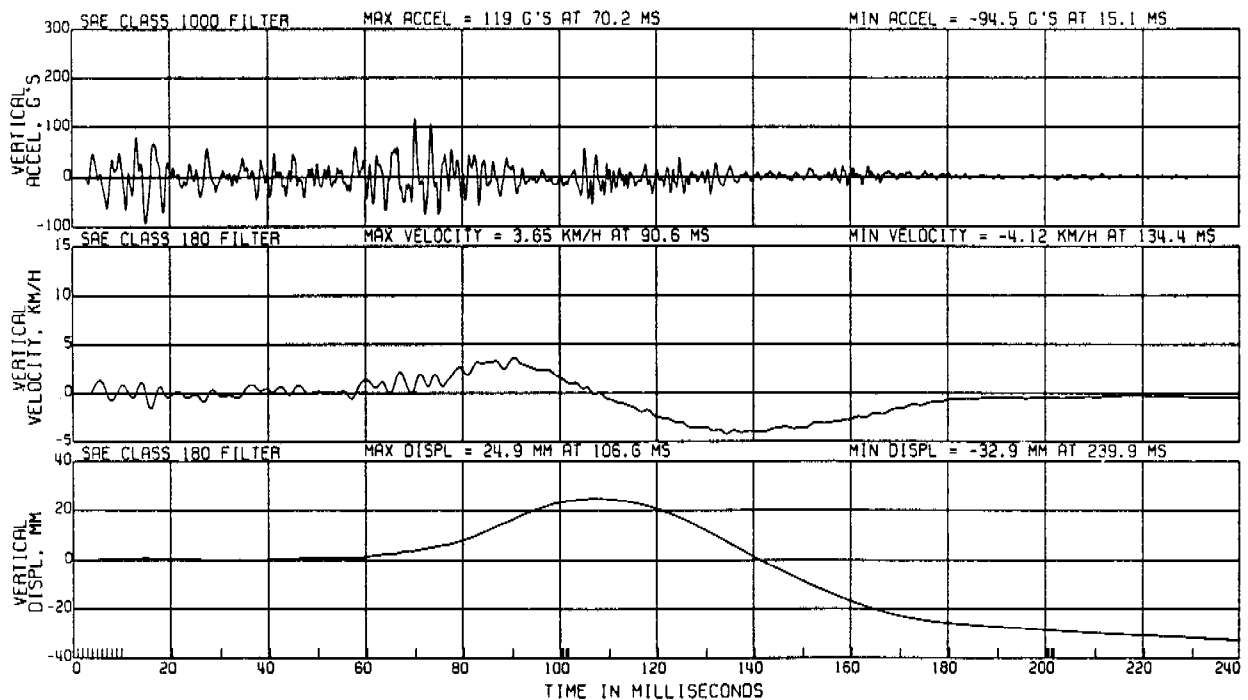
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W9182D 4-000R

L. FRT ROCKER

TEST DATE:12/18/1997



59 PROCESSED 12/18/1997 14:22 V2.07

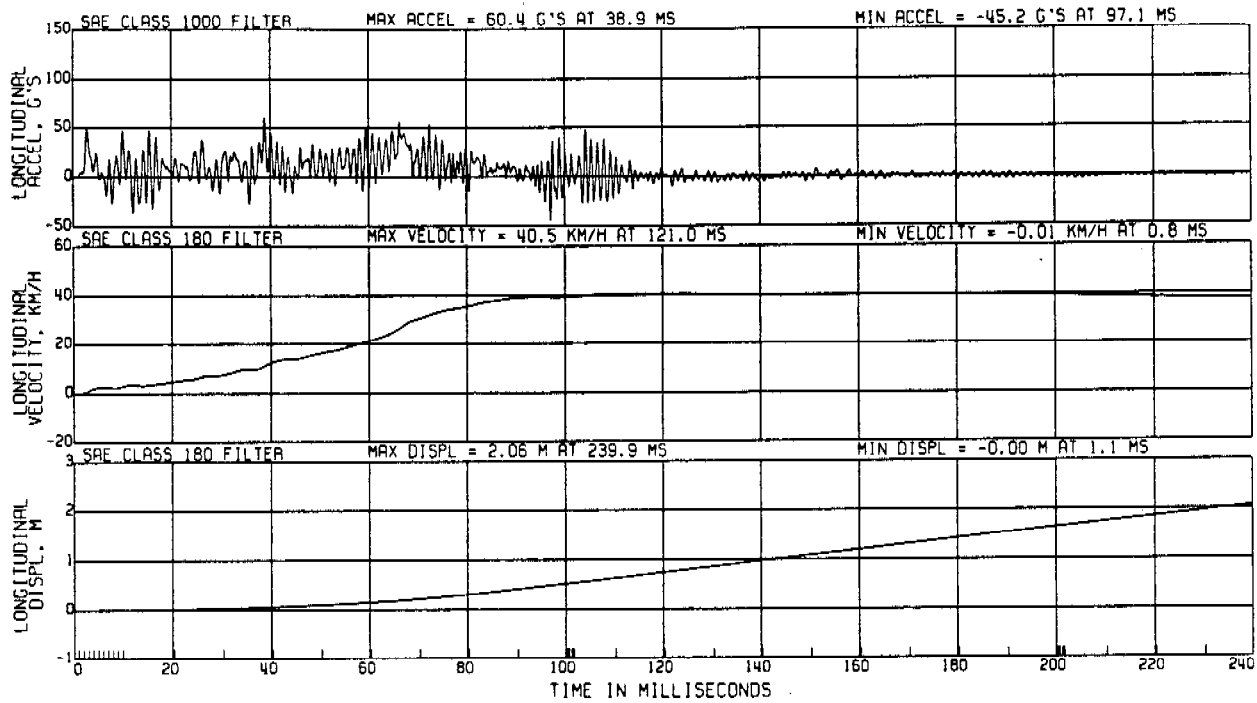
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

R. FRT ROCKER

TEST DATE:12/18/1997



60 PROCESSED 12/18/1997 14:22 V2.07

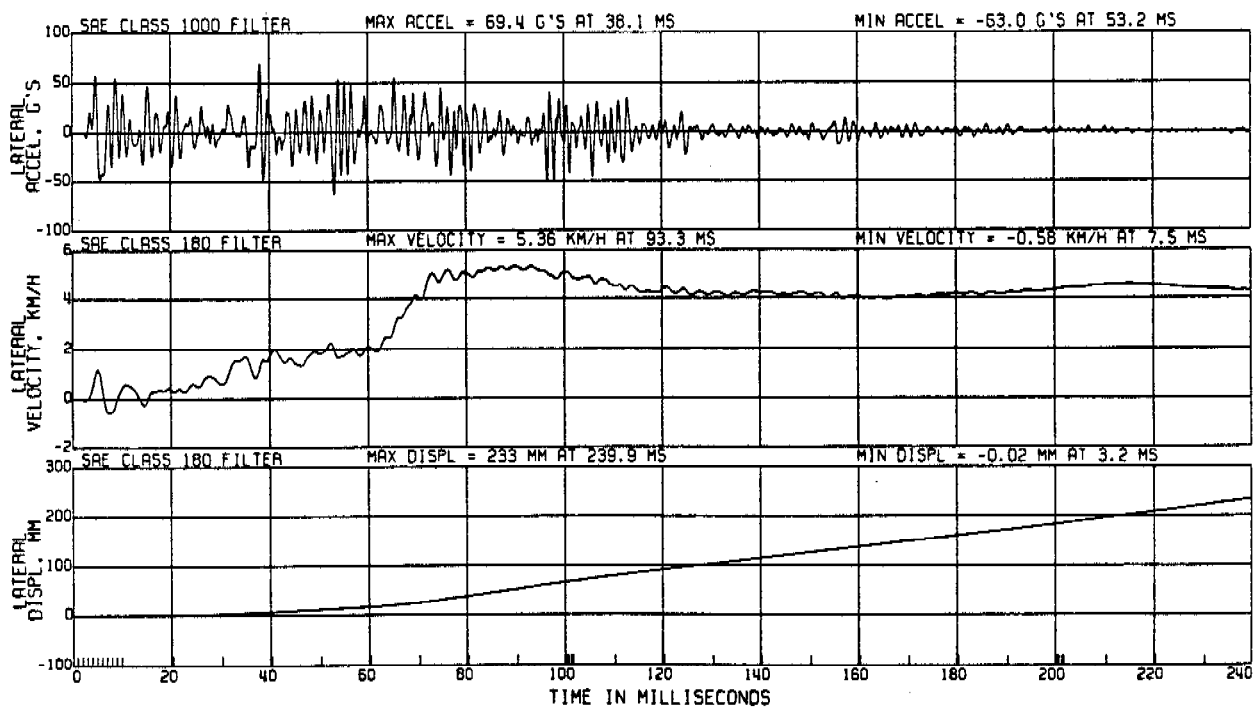
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

R. FRT ROCKER

TEST DATE:12/18/1997

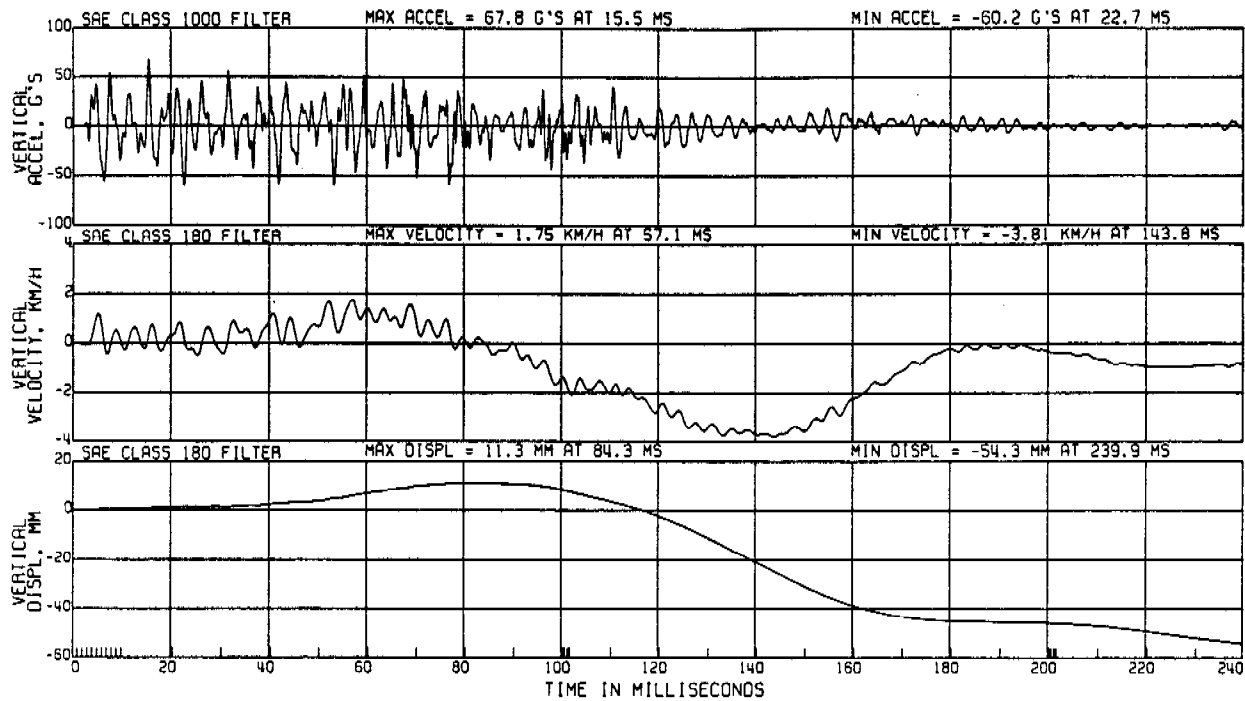


C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000R
ELEC DATA

R. FRT ROCKER

TEST DATE:12/18/1997



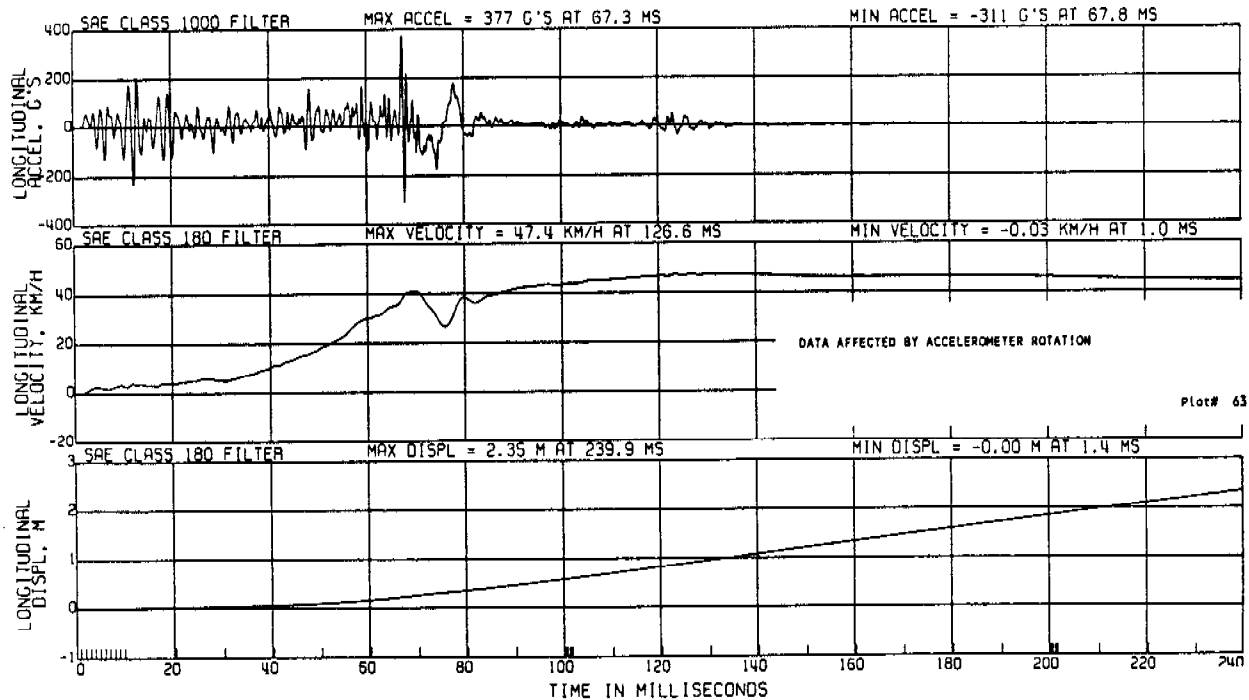
62 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000R
ELEC DATA

L.REAR ROCKER

TEST DATE:12/18/1997



63 PROCESSED 12/18/1997 14:22 V2.07

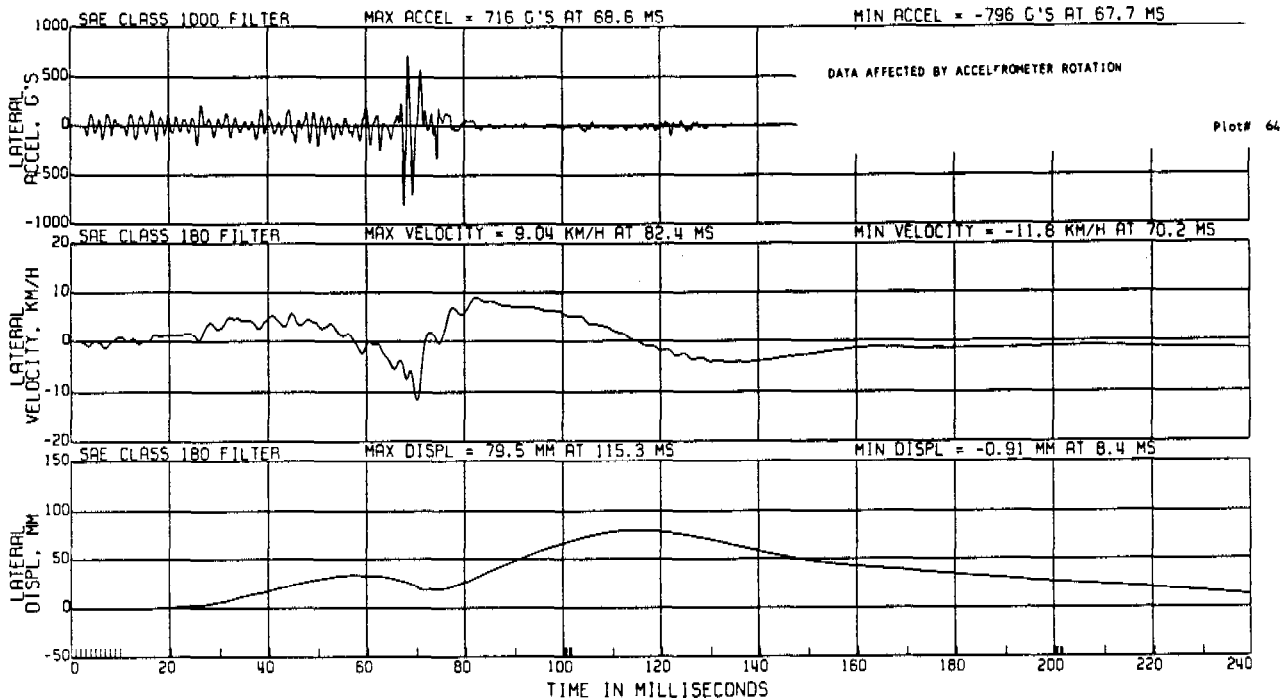
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

L.REAR ROCKER

TEST DATE:12/18/1997



64 PROCESSED 12/18/1997 14:22 V2.07

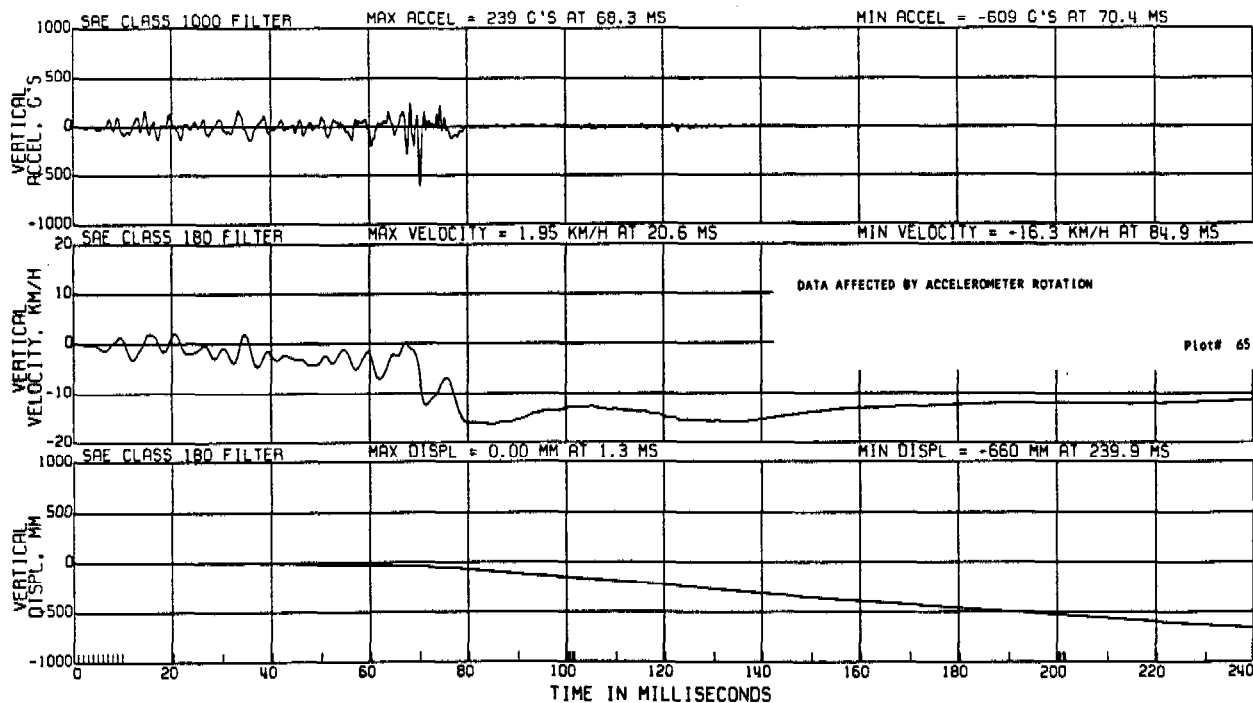
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

L.REAR ROCKER

TEST DATE:12/18/1997



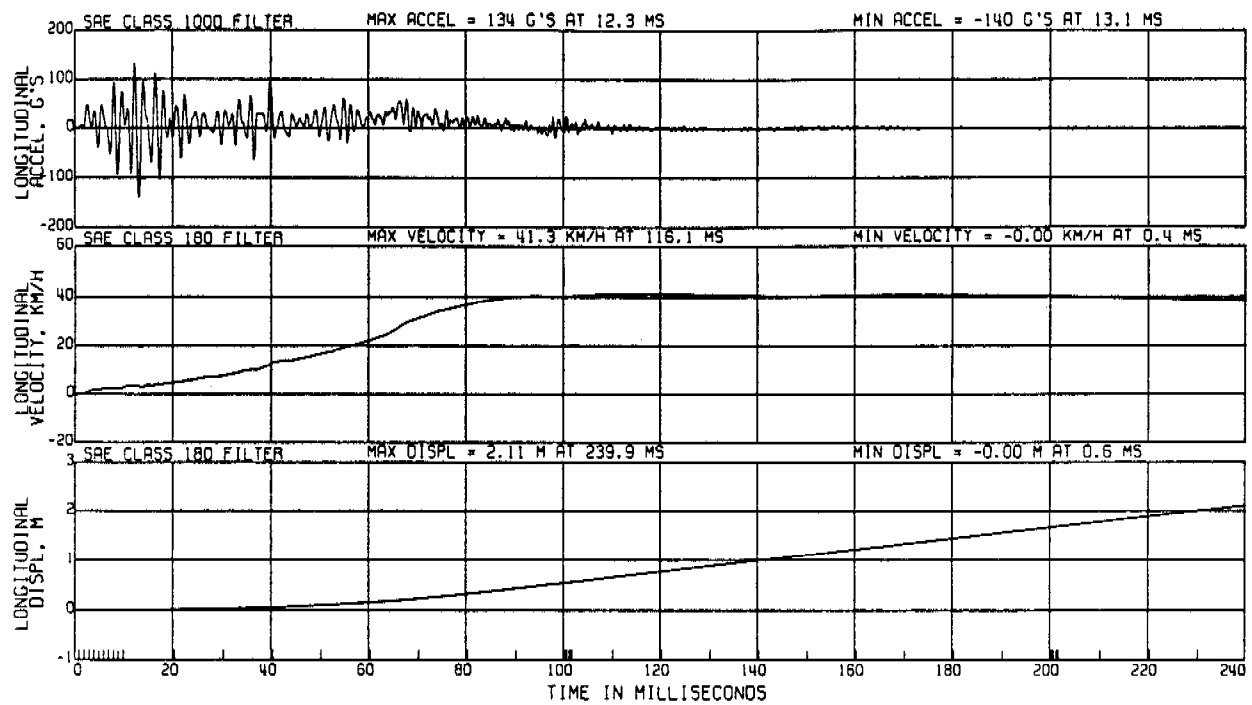
65 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000A
ELEC DATA

R.REAR ROCKER

TEST DATE:12/18/1997



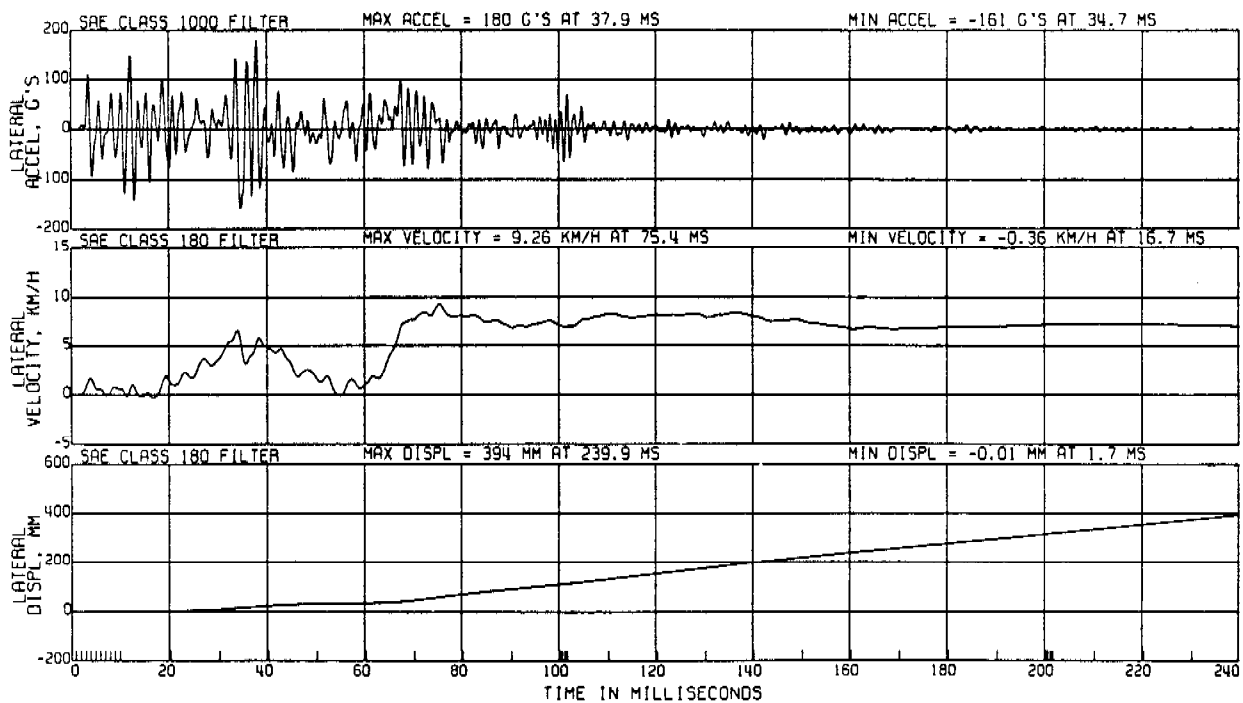
66 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000A
ELEC DATA

R.REAR ROCKER

TEST DATE:12/18/1997



67 PROCESSED 12/18/1997 14:22 V2.07

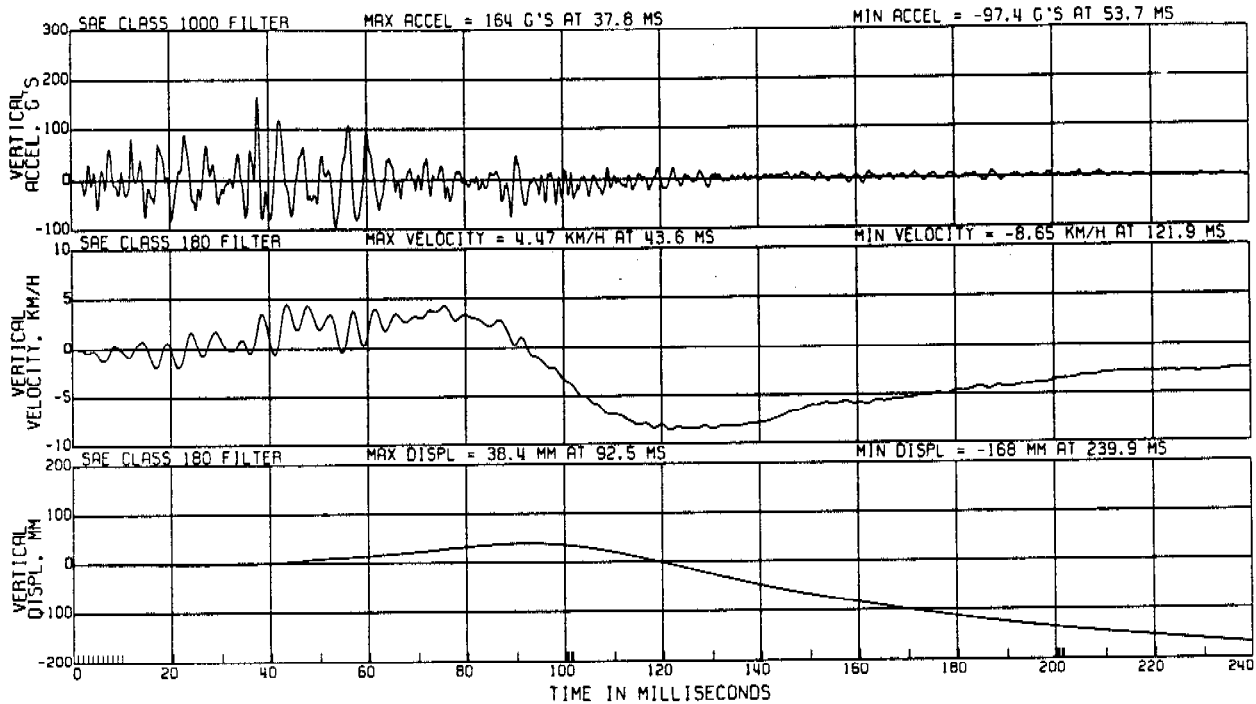
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

R.REAR ROCKER

TEST DATE:12/18/1997



68 PROCESSED 12/18/1997 14:22 V2.07

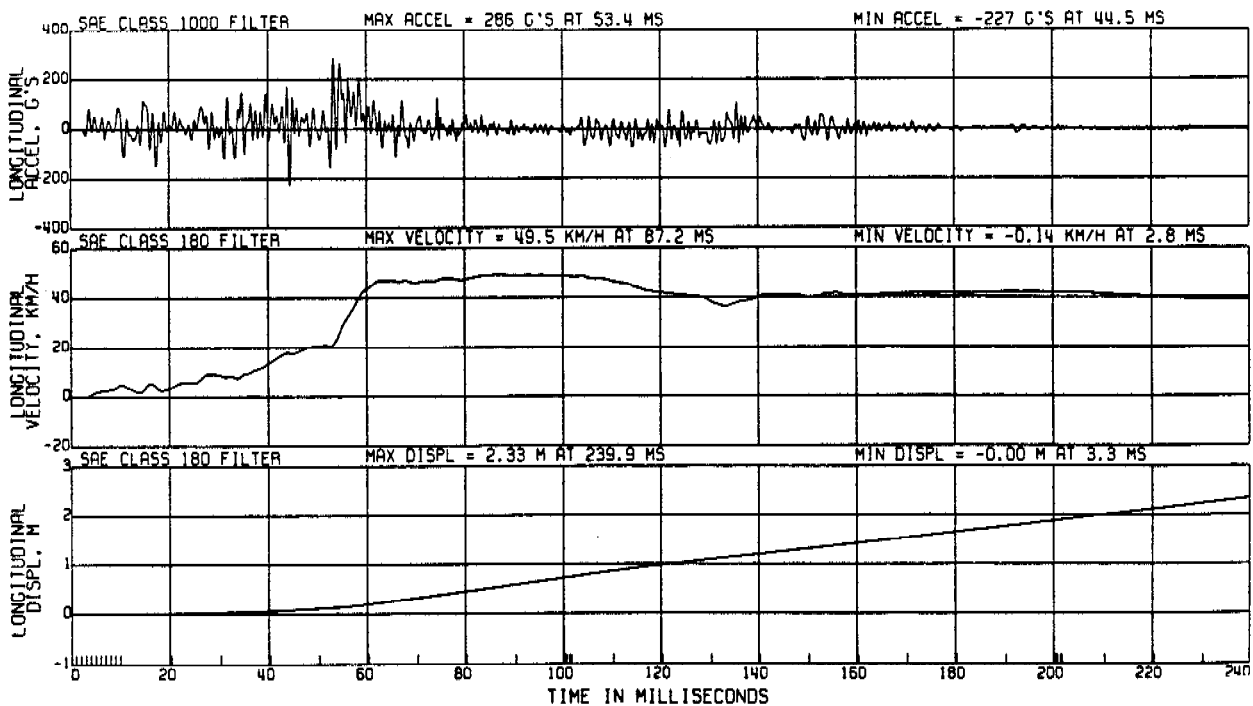
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

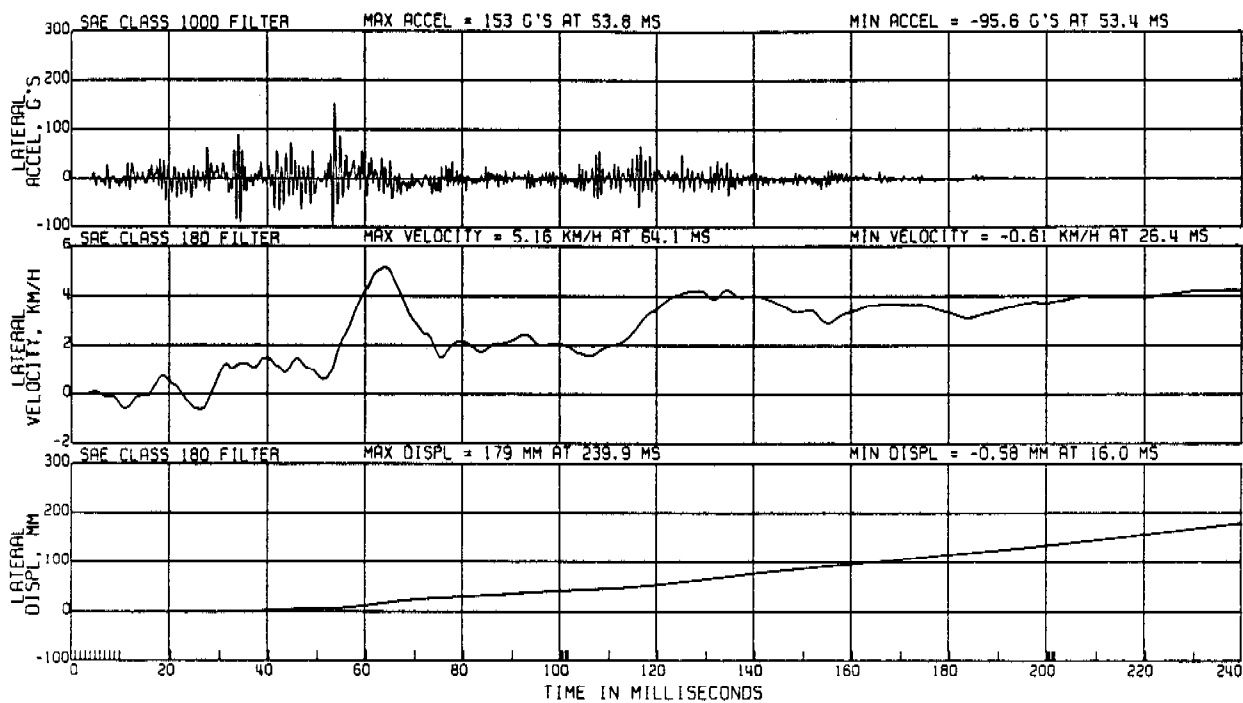
CTR REAR SEATBACK CLOSEOUT

TEST DATE:12/18/1997



C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

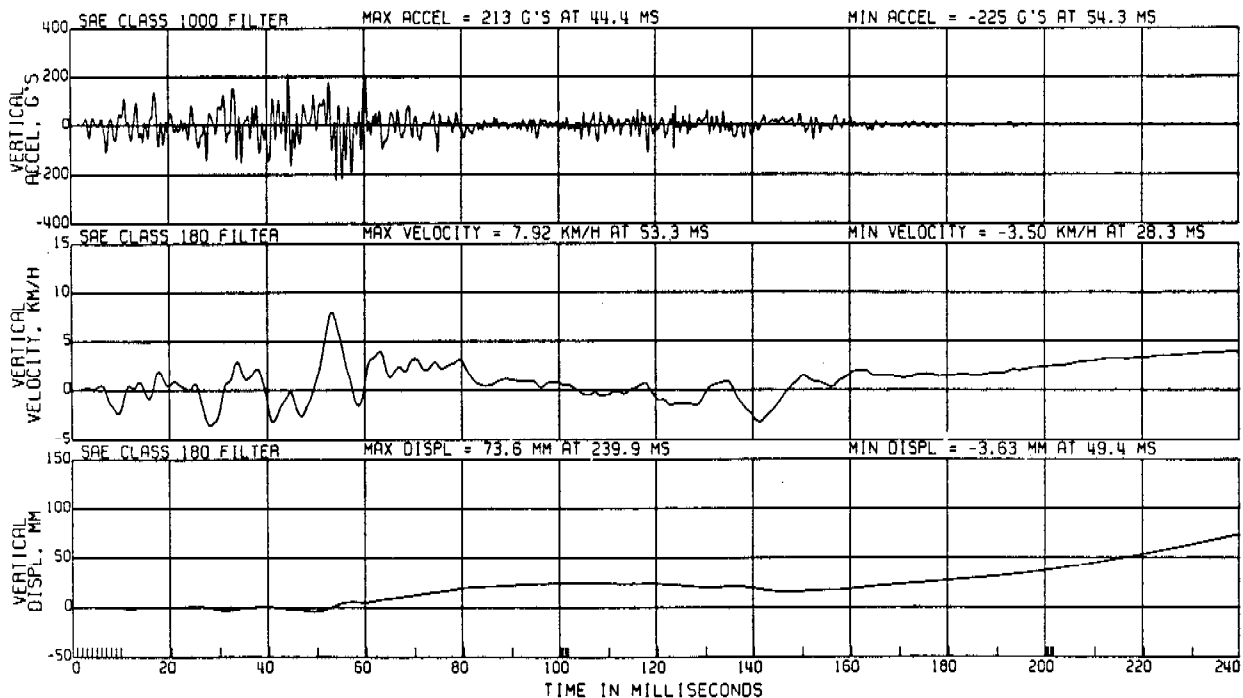
SC 8W9182D 4-000R CTR REAR SEATBACK CLOSEOUT TEST DATE:12/18/1997
ELEC DATA



70 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000R CTR REAR SEATBACK CLOSEOUT TEST DATE:12/18/1997
ELEC DATA



71 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

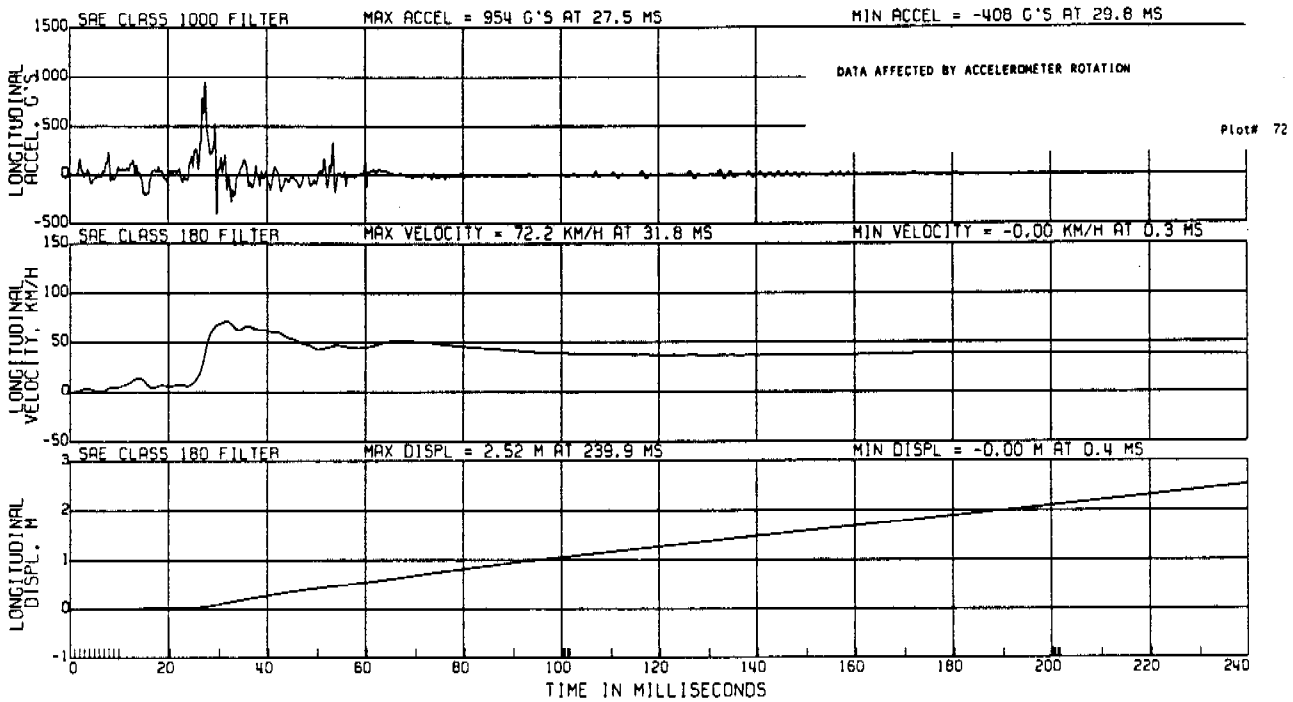
80.9KM/H

SC 8W9182D 4-DOOR

L.REAR FRAME RAIL

TEST DATE:12/18/1997

ELEC DATA



72 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

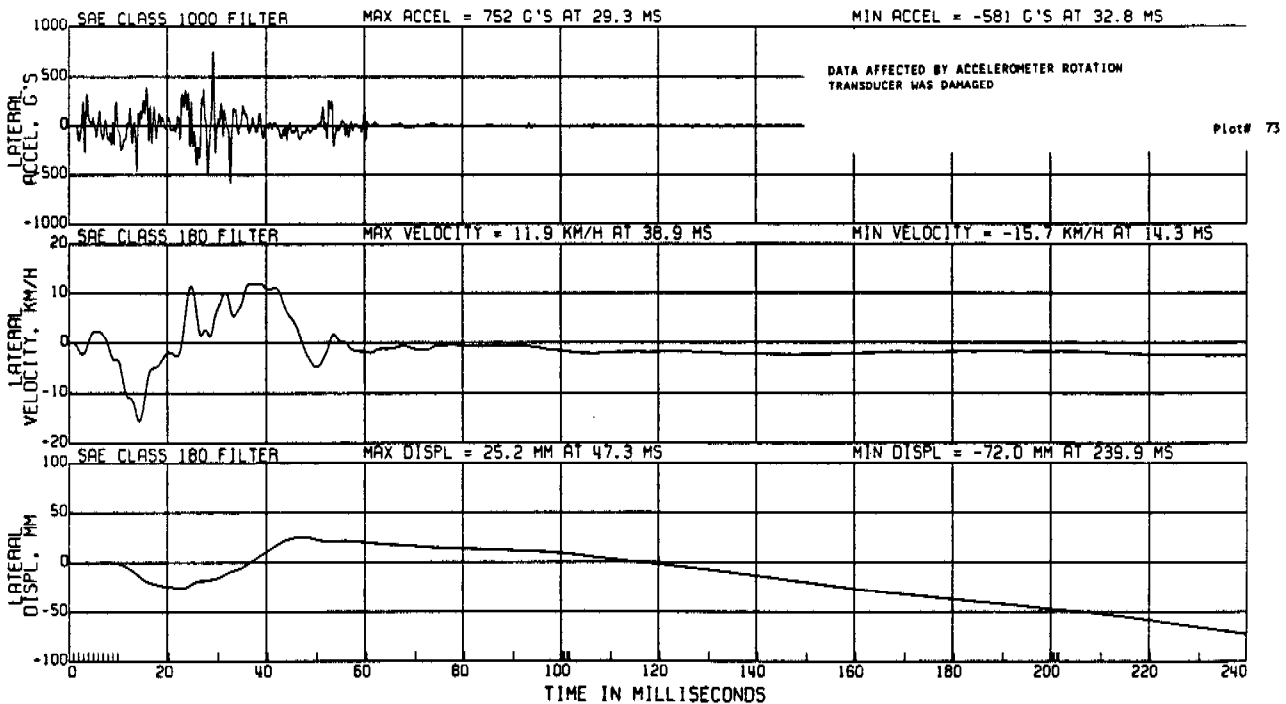
80.9KM/H

SC 8W9182D 4-DOOR

L.REAR FRAME RAIL

TEST DATE:12/18/1997

ELEC DATA



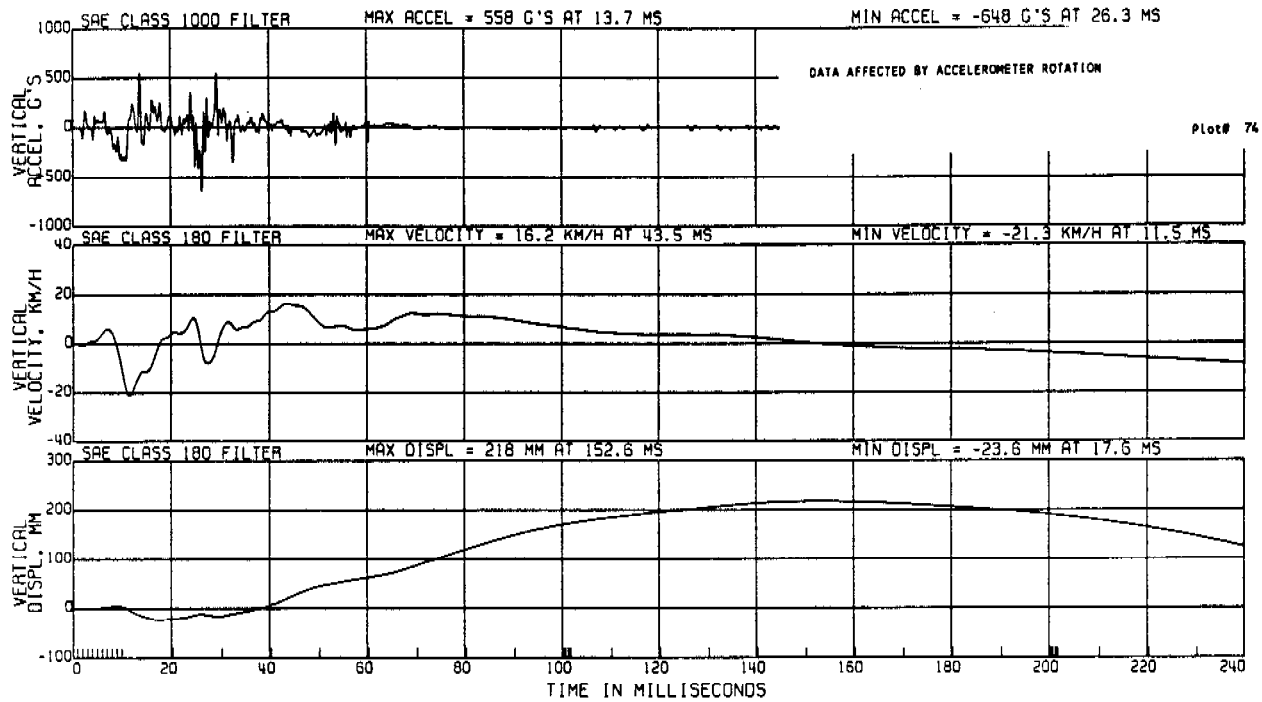
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W91820 4-000R

L.REAR FRAME RAIL

TEST DATE:12/18/1997



74 PROCESSED 12/18/1997 14:22 V2.07

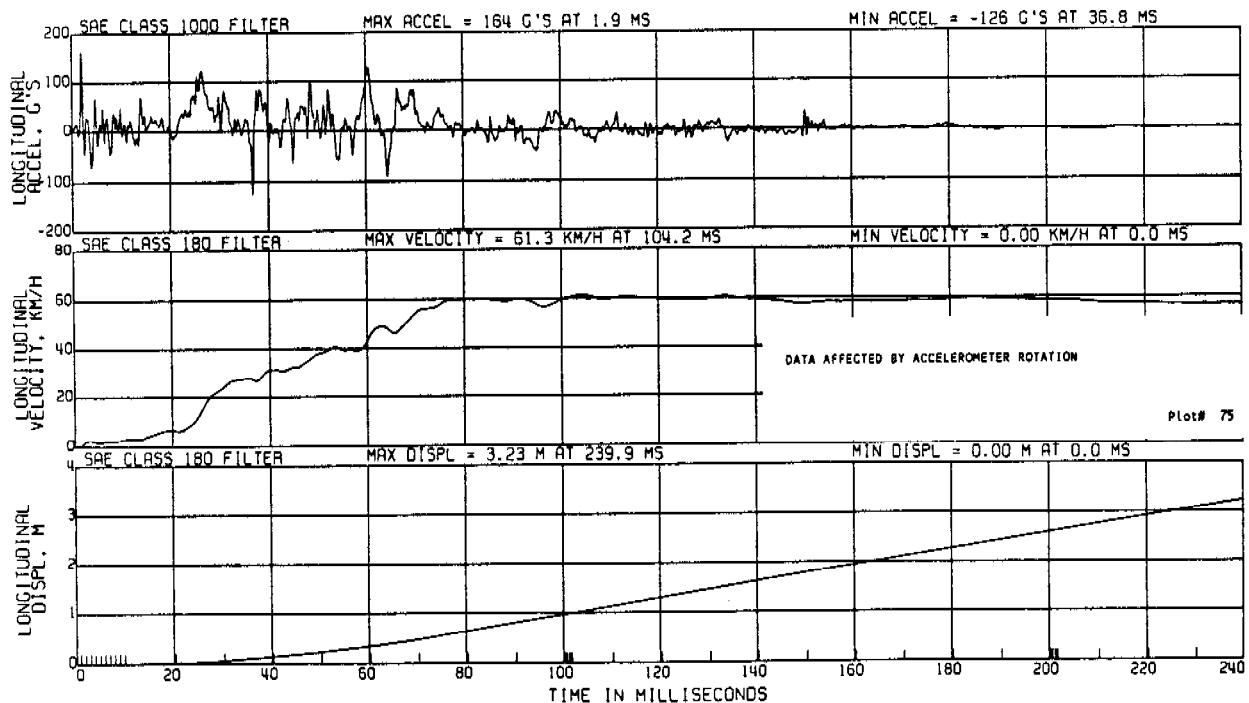
C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W91820 4-000R

R.REAR FRAME RAIL

TEST DATE:12/18/1997



75 PROCESSED 12/18/1997 14:22 V2.07

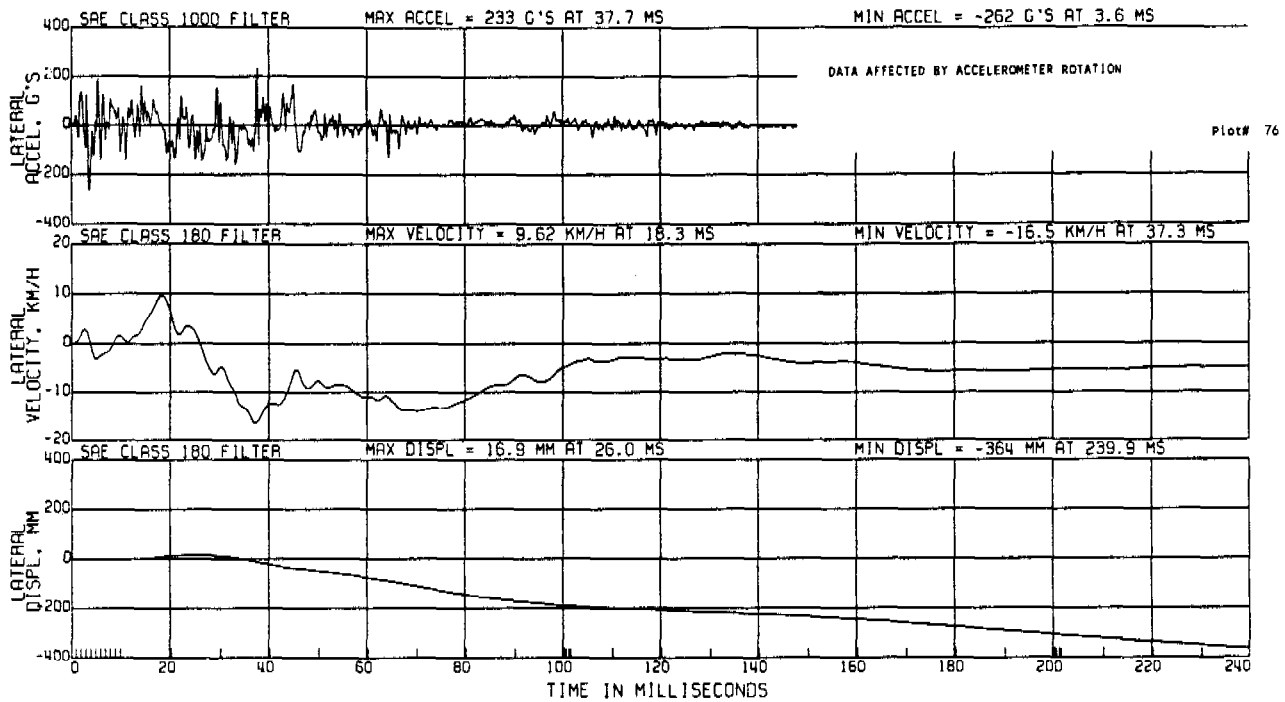
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W9182D 4-DOOR

R.REAR FRAME RAIL

TEST DATE:12/18/1997



76 PROCESSED 12/18/1997 14:22 V2.07

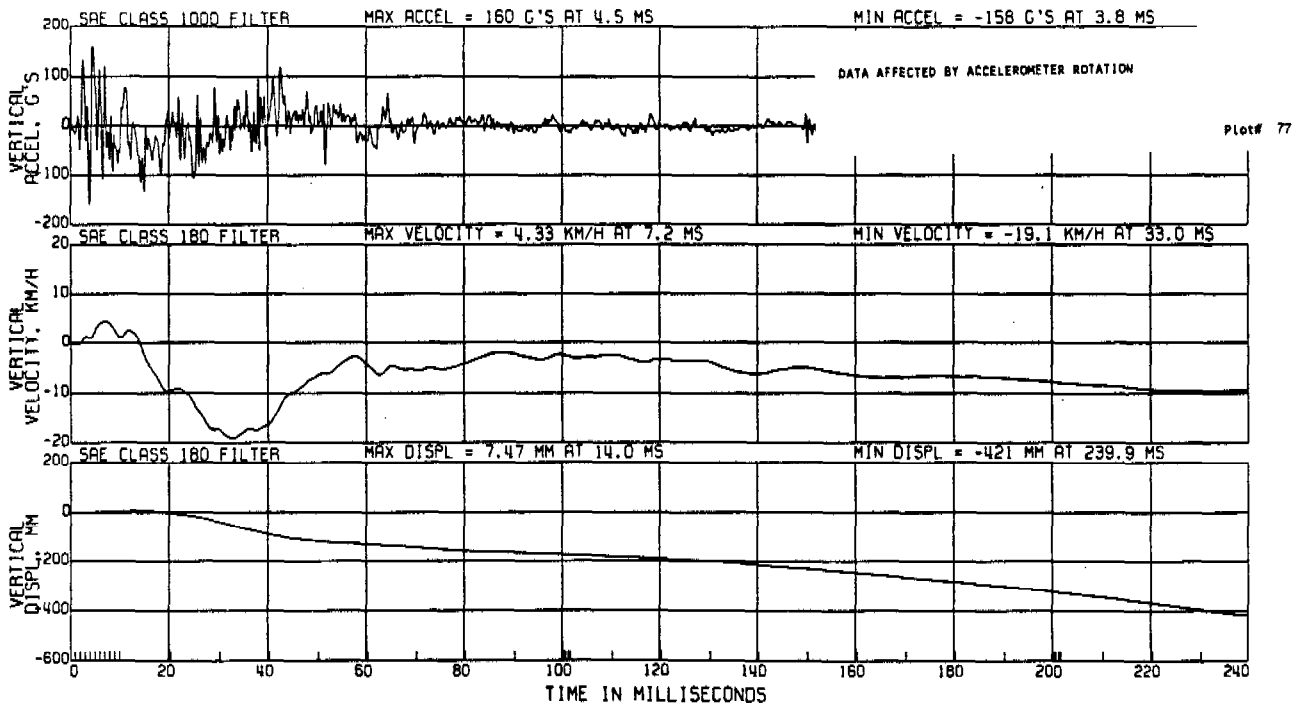
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC
ELEC DATA

8W9182D 4-DOOR

R.REAR FRAME RAIL

TEST DATE:12/18/1997



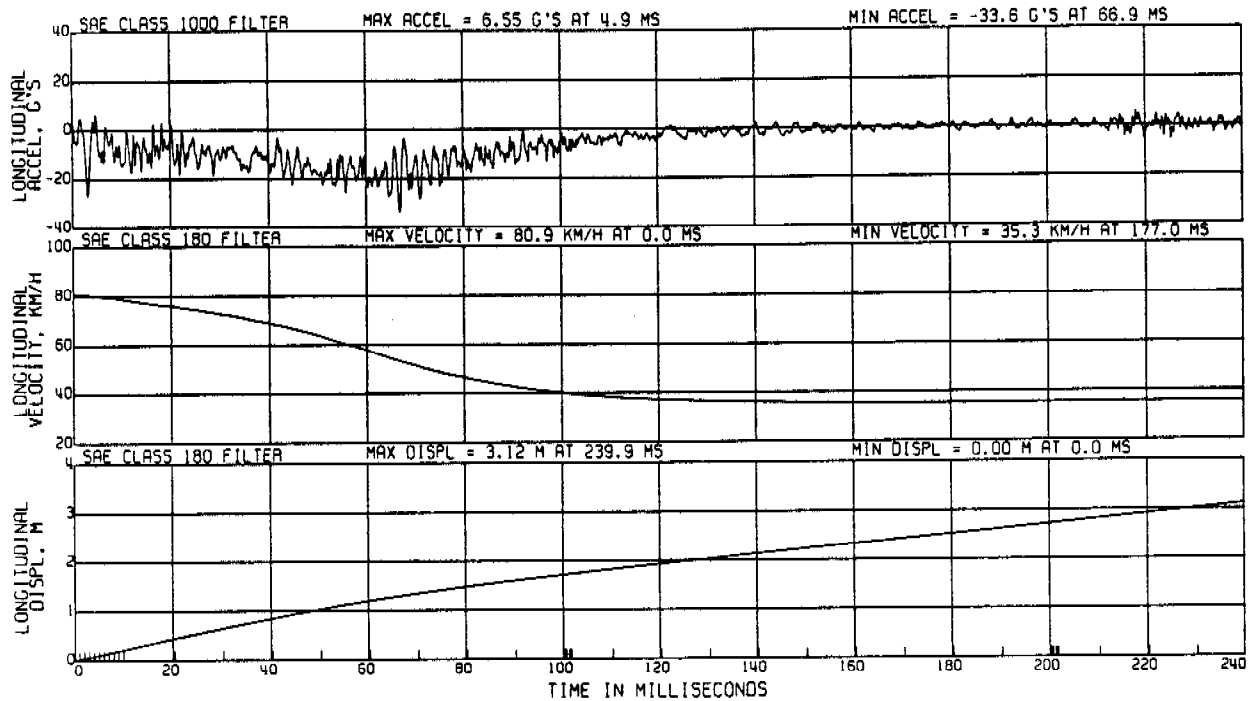
77 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

LTV MDB AT C.G.

TEST DATE:12/18/1997



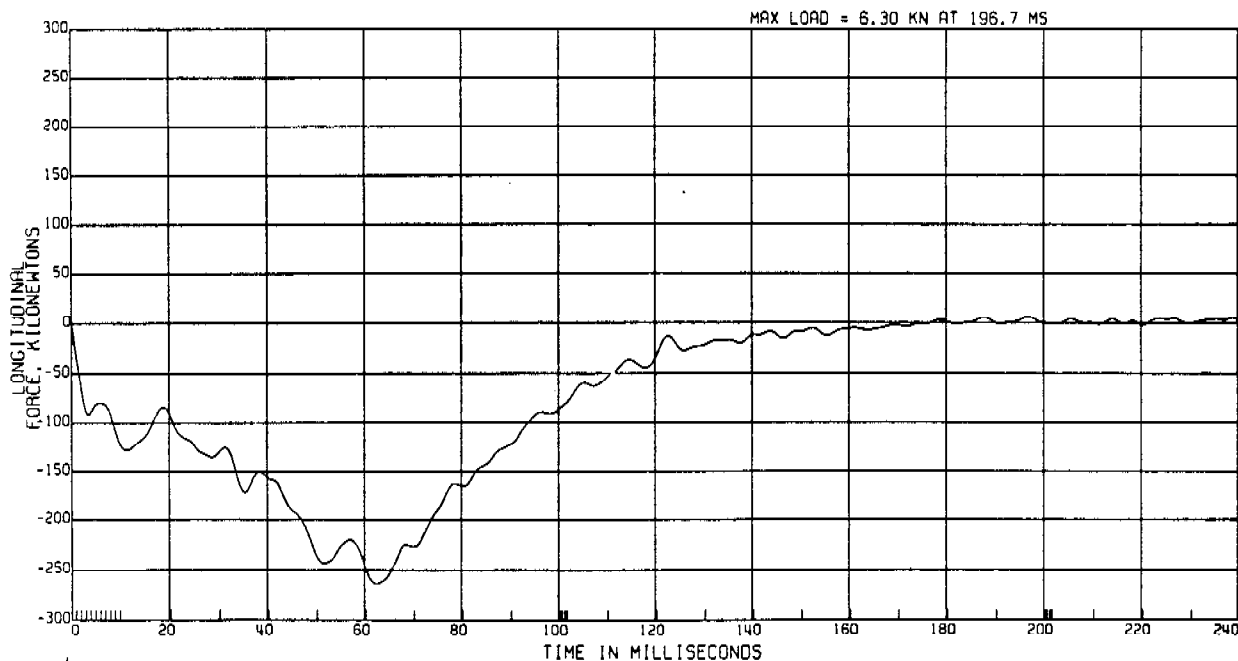
78 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA, SAE CLASS 60

LTV MDB LONG. FORCE AT C.G.
(1371.5 KG) (9.807) (LONG.ACCEL)

TEST DATE:12/18/1997



79 PROCESSED 12/18/1997 14:22 V2.07

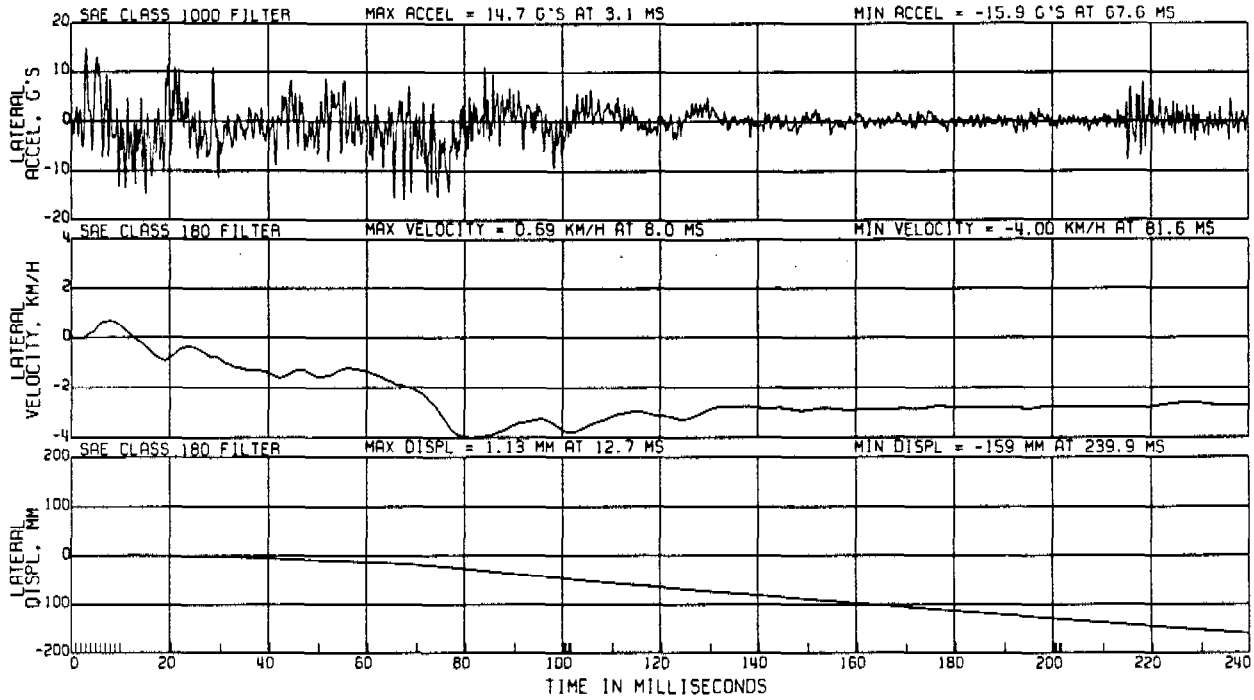
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

LTV MDB AT C.G.

TEST DATE:12/18/1997



80 PROCESSED 12/18/1997 14:22 V2.07

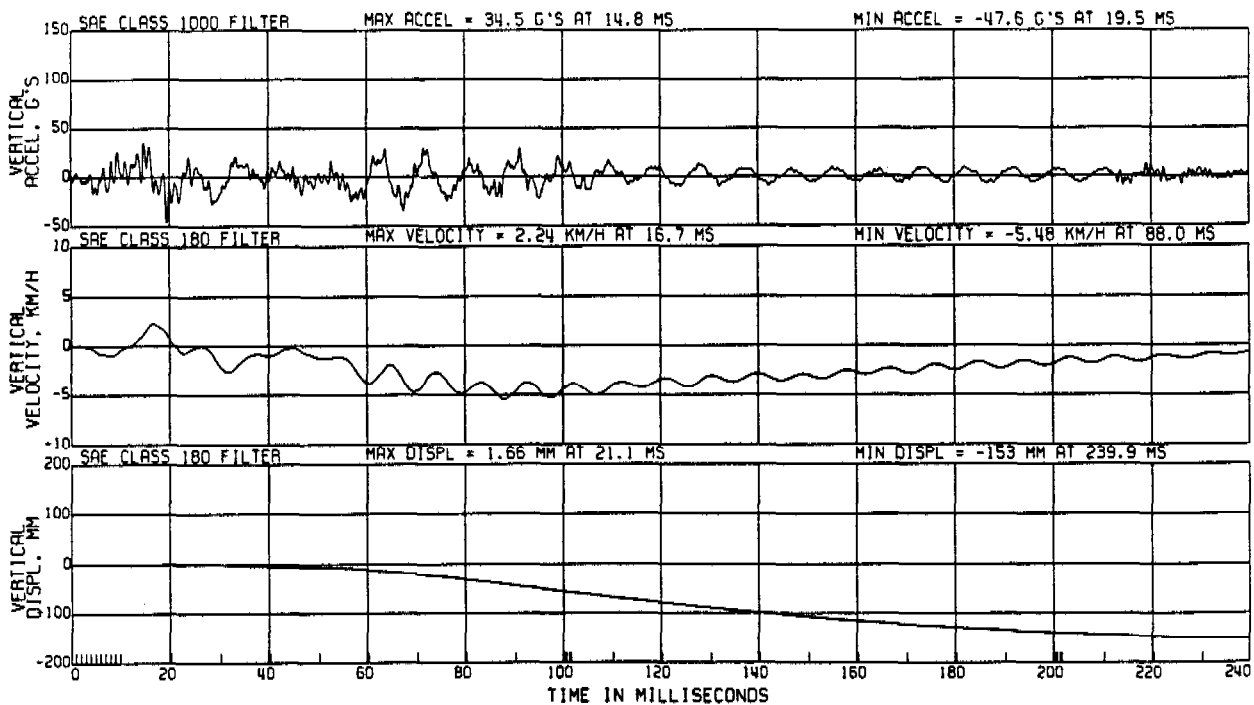
C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE

80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

LTV MDB AT C.G.

TEST DATE:12/18/1997



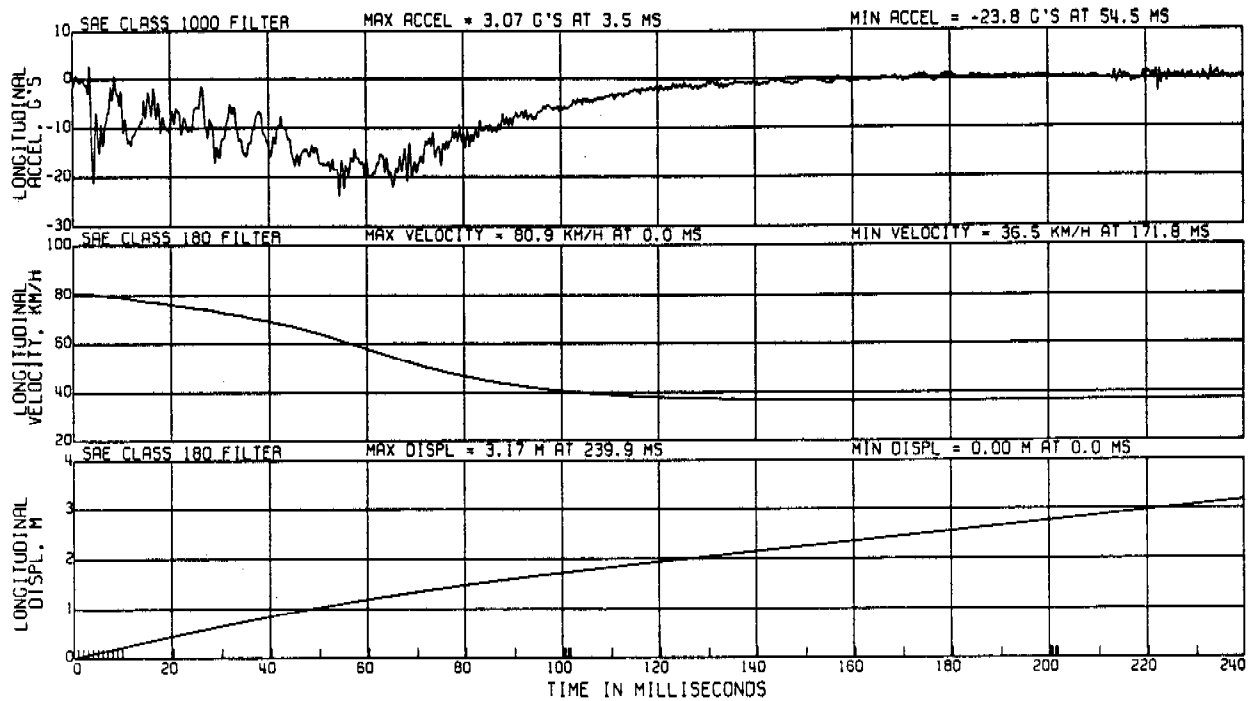
80 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000R
ELEC DATA

LTV MOB AT REAR C/MBR

TEST DATE:12/18/1997



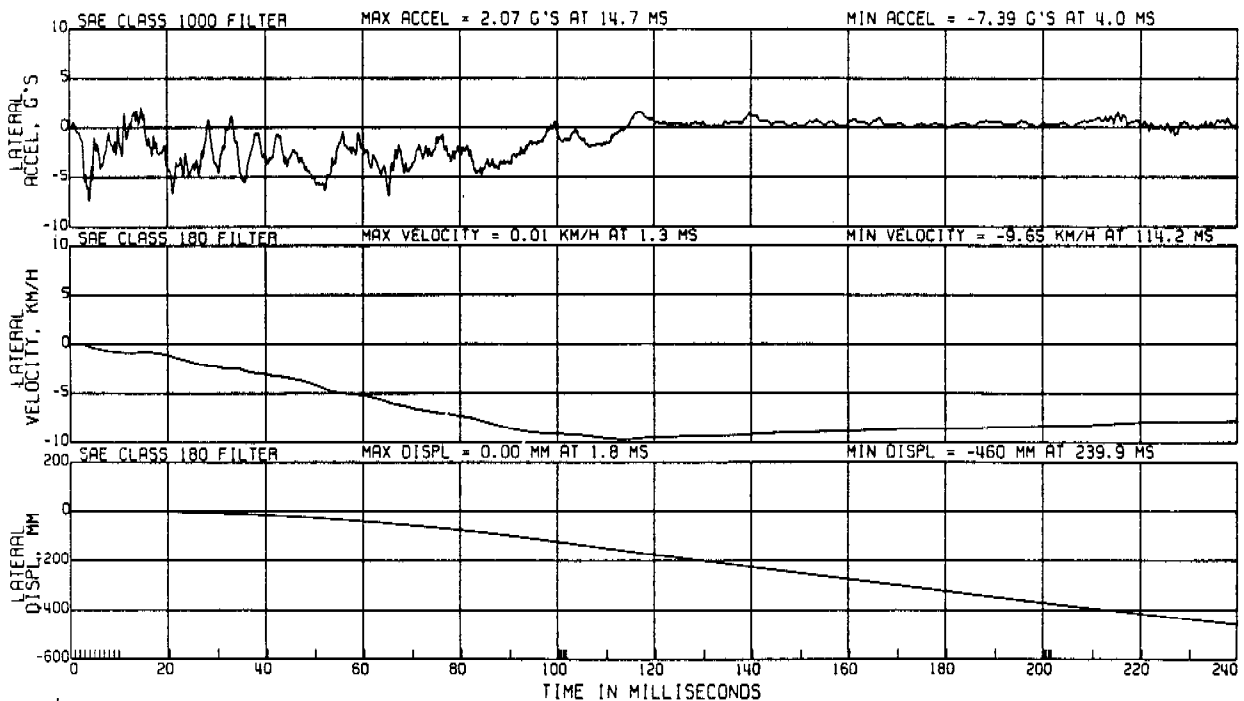
82 PROCESSED 12/18/1997 14:22 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MOB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-000R
ELEC DATA

LTV MOB AT REAR C/MBR

TEST DATE:12/18/1997



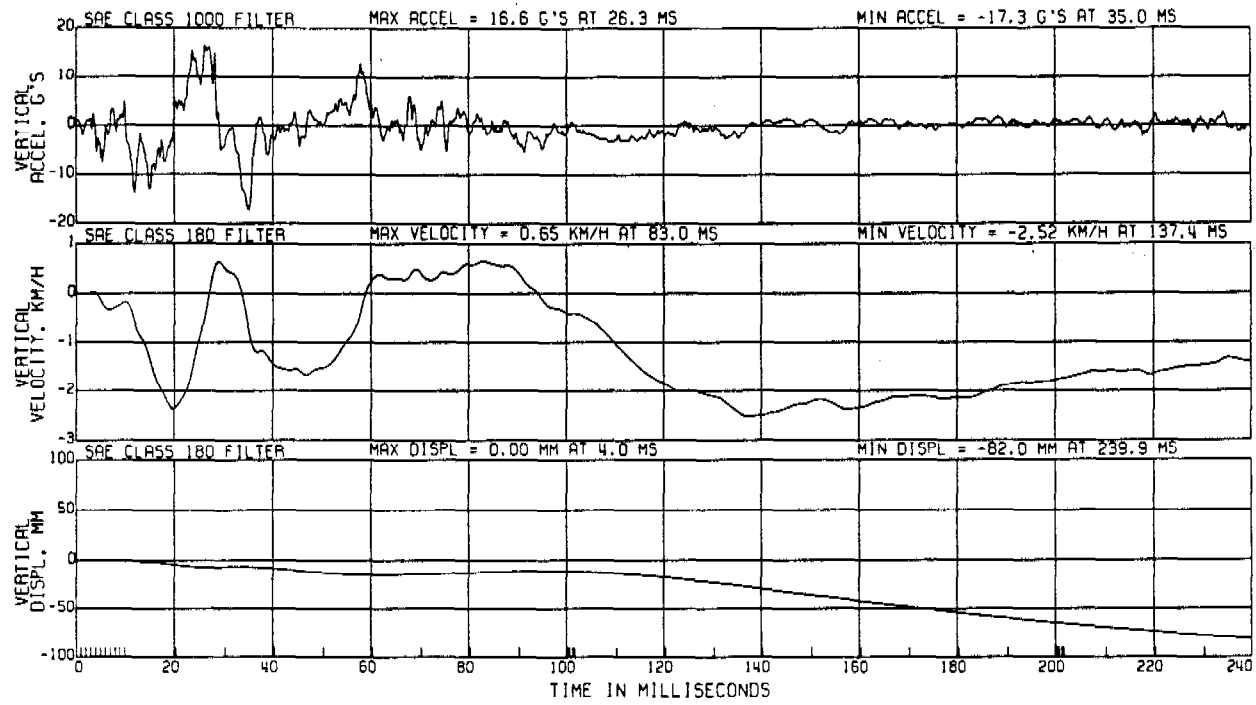
83 PROCESSED 12/18/1997 14:23 V2.07

C11818 L.REAR IMP 70% OVERLAP LTV MDB TO STATIONARY VEHICLE 80.9KM/H

SC 8W9182D 4-DOOR
ELEC DATA

LTV MDB AT REAR C/MBR

TEST DATE:12/18/1997





Safety Center
NORTH AMERICAN OPERATIONS

June 12, 1998
USG 3411

Mr. Carl A. Ragland, Jr.
Office of Crashworthiness Research
National Highway Traffic Safety Administration
400 Seventh Street S.W.
Washington, DC 20590

Subject: Settlement Agreement
Section B. Fire Safety Research
Project B.5 Test Reports / Data / Videos / Photographs

Dear Carl,

Enclosed is one copy each of the test report, test data, video and photographs from the five rear impact research crash tests General Motors Corporation conducted under Project B.5 of the March 1995 GM/DOT Settlement Agreement. The table below lists the enclosed material.

List of Enclosed Material -
Enclosure No. (No. of pages or photos)

Car	Test No.	Test Report + Data	Video	Photos
1998 Honda Civic 4-door	C-11817	1 (54)	2	3 (90)
1998 Ford Escort 4-door	C-11818	4 (54)	5	6 (68)
1998 Volkswagen Jetta 4-door	C-11816	7 (54)	8	9 (79)
1998 Nissan Sentra 4-door	C-11828	10 (54)	11	12 (64)
1998 Chevrolet Cavalier 4-door	C-11829	13 (54)	14	15 (65)

If you have questions regarding this information, please contact me (810-947-1731) or Mr. Richard Humphrey in our Washington, DC office (202-775-5071).

Sincerely,

Paul Eichbrecht

Enclosures

c (w/o encl.): Lou Brown, NHTSA

Safety Affairs & Regulations / Safety Standards

Mail Code 480-111-S56 • 30200 Mound Road • Warren, Michigan 48090-9010
Phone: 810-947-1731 Fax: 810-986-8129
U3411B5.DOC



Post-it® Fax Note	7671	Date	7/14/98	# of pages	1
To	CARL RAGLAND	From	PAUL EICHBRECHT		
Co./Dept.	NHTSA	Co.	GM		
Phone #	8-1-202-366-4729	Phone #	810-947-1731		
Fax #	8-1-202-366-5470	Fax #			

From: Paul T. Eichbrecht on 07/14/98 09:03 AM

GM Technical Center
Warren, MI 48090

To: OAS DIAMONDNET[DMNSSW.OAS] cc: Douglas W. Kononen
Subject: RE: B5 RESULTS DETAILS

<oas>
to nn=Carl.Ragland @ nhtsa.dot.gov
<oas>

Carl, Doug Kononen forwarded your e-mail request seeking the spillage site details for the three B5 test vehicles which leaked Stoddard solvent. I'm not sure what "B5 report" your message referred to, but here are the details you requested. They'll also be in the B5 final report as soon as I'm able to complete it.

Escort - The filler cap exterior fractured off from its "plug." The plastic "plug" remained in the filler neck. A portion of the plug appears to have deformed/fractured during impact, allowing the rollover spillage. These results appear to be caused by the local deformation/crash forces in the filler area.

Jetta - The fuel sender unit seal plate fractured (hairline type crack) at the base of the attachment of sender electrical connector to the seal plate. It appears that forces exerted by contact of the connector/attachment with the floor pan may have caused this crack. No fracture size measurement was made. [Carl, the photos I sent you with the 6/12/98 GM letter (USG 3411) show this reasonably well.]

Cavalier - The deformed right rear underside portion of fuel tank was cut by contact with a protruding edge (from crash deformation) of the intruding right side rear suspension trailing arm bracket. No cut size measurement was made. [Photos you have show this area.]

I hope this information helps.

Carl,

I continue to be unsuccessful in getting my e-mail system to communicate with yours, so I'm faxing this response. Sorry for the delay.

Paul Eichbrecht